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MEDICINE OF THE DELAWARE AND RELATED ALGONKIAN INDIANS



By Gladys Tantaquidgeon



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ANTHROPOLOGICAL SERIES

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FOLK MEDICINE
OF THE DELAWARE
AND RELATED
ALGONKIAN INDIANS

BY
GLADYS TANTAQUIDGEON

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THE PENNSYLVANIA HISTORICAL
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Foreword

THE first section of this book, Delaware Medicine Practice and Folk Beliefs, and the related appendices were first published as *A Study of Delaware Indian Medicine Practice and Folk Beliefs* (Harrisburg: Pennsylvania Historical Commission, 1942) under the editorship of the late Donald A. Cadzow, who was then State Anthropologist, and the late C. E. Schaeffer, Assistant State Anthropologist.

The second part, Notes on Mohegan Medicine Practice and Folk Beliefs, is a revision and expansion of "Mohegan Medicinal Practices, Weather-Lore and Superstition, published in the *Forty-third Annual Report of the Bureau of American Ethnology, 1925-1926* (Washington: United States Government Printing Office, 1928).

For making this volume possible, I would like to express my appreciation to the members of the Pennsylvania Historical and Museum Commission and its Executive Director, Dr. S. K. Stevens. I would also like to thank Mr. William N. Richards, Director of the Bureau of Museums, and Mr. J. Duncan Campbell, Director of the William Penn Memorial Museum, for the approval and encouragement they have given the Anthropological Series; and Dr. Barry C. Kent, the general editor of the series. Finally I wish to acknowledge my debt to Dr. Donald H. Kent, Director of the Bureau of Archives and History; Mr. William A. Hunter, Chief of the Division of History, who supervised publication; and Mr. Harold L. Myers, Associate Historian, for his encouragement and assistance and for his handling of publication.

GLADYS TANTAQUIDGEON

July 1, 1971

The reader should be aware that in this volume scientific names for plants in general predate Merritt Lyndon Fernwauld, *Gray's Manual of Botany*, eighth edition (New York, 1950).

THE AUTHOR

From early childhood, Miss Gladys Tantaquidgeon, a Mohegan Indian of Uncasville, Connecticut, has been keenly interested in the history and traditions of her people. She attended the University of Pennsylvania as a student of anthropology, and has done research among the surviving eastern Algonkian Indians of New England and Canada. She has written articles on mythology and herb lore for scientific and popular magazines.

Leaving the eastern field in 1934, Miss Tantaquidgeon joined the United States Indian Service and became a community worker on the Yankton Sioux Reservation, Greenwood, South Dakota. She later served as a specialist in Indian arts and crafts for the U. S. Department of the Interior on several reservations in the Dakotas, Montana, and Wyoming.

Since her retirement, Miss Tantaquidgeon has been associated with her brother, Chief Harold Tantaquidgeon, in a folk-type Indian museum which they own and operate in their native community of Mohegan in the town of Uncasville. Here the arts and crafts of New England tribes and of other Indians of the Western Hemisphere are displayed.

*Delaware Medicine Practice
and Folk Beliefs*



Tantaquidgeon Indian Museum

Gladys Tantaquidgeon in 1926

Introduction

IT WAS my privilege and pleasure in the spring of 1930 to record the following data on native medical practices and folk beliefs as dictated by Wi-tapanóxwe (pronounced Wee-tah-pah-NOKH-way), "Walks With Daylight," a Delaware Indian of Dewey, Oklahoma. Wi-tapanóxwe was retained as an informant for some months in Philadelphia with the aid of funds provided, in part, by the Pennsylvania Historical Commission. Some interesting facts concerning his life, as well as historical data pertaining to the location, migrations, and status of the Delaware Indians were presented in Frank G. Speck, *A Study of the Delaware Big House Ceremony*, 1931. It seems unnecessary, therefore, for me to duplicate such information in the present monograph.

The material presented herein is offered not as a complete and exhaustive study of the curing practices and plant lore of the Delaware Indians but as the theories, practices, and beliefs of one practitioner—information for the most part to be regarded as personal property bequeathed to the informant by certain members of his family or revealed to him in dreams. There are, however, incorporated in these notes descriptions of certain observances of a more general nature which represent the common property of the tribe.

To much that has been written giving actual data on the pharmacology of various tribes in North America, the collection of Delaware material presented here will prove a helpful addition. Among the leading studies in this field, mention should be given to that of Robbins, Harrington, and Freire-Marreco (1916) on the Tewa, and various others by Mooney (1892), Swanton (1928a, 1928c), Speck (1937b), and Olbrechts (Cherokee MS., 1929) for the Southeast. For the Algonkian-speaking peoples of various tribal and cultural types the quantity of published material is also considerable, permitting ere long some attempt at a comparative summary. In this connection similar data contained in the Menomini studies of Smith (1923) and Bloomfield (1928), the Ojibwa researches of Hoffman (1893) and Densmore (1928), and Gilmore's material (1919) from the Missouri River region, not to mention information published by Speck (1907, 1909, 1911, 1915, 1917), all offer much that is suggestive of the historical back-

ground from which such practices and beliefs may be supposed to have developed.

In connection with such studies I have in mind also the collections of unpublished herbal and charm cures obtained from various remnants of Algonkian peoples on the Atlantic seaboard by Dr. Speck (Powhatan MS.), Dr. Hallowell (St. Francis Abenaki MS.), and myself (1928, Gayhead and Mashpee Indian MS.). The material from these various groups, although possessing its own ethnic individuality, still overlaps in certain respects. And where the practices and beliefs of many tribes reveal similarity to the folk remedies of Europeans in the New World, the problem of interpretation of properties is made extremely complicated. Realizing that many of the plants and weeds are migrants from Europe to the New World, we shall have to proceed with caution in view of the fact that the Indians had an ample native pharmacology of their own before the period of conquest, and that an experimental spirit was always and everywhere active in revealing new cures among the invading plant hosts. It will, therefore, not be an easy task to distinguish between what is Indian and what is European until we can assign the concepts and practices to one or the other.

No one, I believe, would deny that there was much borrowing, as it is called, on the part of the colonial whites from the Indians, as a glance at the voluminous contents of the *Dispensary of the United States of America* (1926) will reveal. In the north this process was initiated by the French who accompanied Cartier (1906: 73-77) and who would have perished from scurvy had it not been for the therapeutic knowledge of those Algonquin or Montagnais who supplied them with an effective medicine concocted of white cedar bark. Subsequent to this reference in the early documents many others are encountered indicating a deep-rooted system of primitive medicine which was, as it should be, partly pharmacological and partly psychological.

The Delaware system of health protection and disease curing seems to be a blend of what students of comparative medicine have agreed in calling primitive religion and science. In Delaware the sophistry and the performances of healing are religious while the knowledge applied in these processes is scientific. And yet where the action of the herbs, if not other substances, is mechanical or chemical, there is always the dependence upon the spiritual power of the healer with the deep emotional attributes from which the Delaware mind is never free when operating in these channels of thought. There has been, however,

a certain element of hard-headed and non-magical experimentation blended together in the development of the herbal cures, at least from the point of view of native method. For the observation of repeated success with some remedies and failure with others has not escaped the attention of the native doctor. Conversations with Wi-tapanóxwe and the herbalists of other tribes have made me aware frequently that selective judgment was combined with past experience in the profession. To deny this would be to discount the mental stature of these men of thought and study to a degree that would bring a smile to the person who has had intimate associations with the native doctors among any of the eastern tribes. Like students of other professions they comprehend the unlimited bounds of knowledge and are ever seeking for additions to both pharmacopia and technical or magical theory. And the test of efficacy is present in their disciplines even though the test is judged by the results of treatment rather than by the science of composition. I might compare it, in some respects, to the tenets of Christian Science without, I hope, doing too much injustice to the basis of this much favored school of reasoning. The Delaware would offer an instance of the powerful influence of religious beliefs upon professional technique, cited by Kirkpatrick (1929, p. 249) and elaborated by Boas (1929), Goldenweiser (1922), and Lowie (1924b) among American students of the subject. Here, however, lies an extended field for investigation which in no manner depends for its development upon Delaware data, but in which, I hope, this material will find a place as illustrative of the status of magical science and religion among one of the eastern Algonkian tribes.

That the Delaware of today are not so different from their forebears of two centuries ago as regards ability to treat cases that baffle their rivals of the European profession is shown by a statement in 1698 of Gabriel Thomas (1912: 323, 340) who said, "the Indians . . . [are] as able Doctors and Surgeons as any in Europe, performing celebrated Cures therewith . . ." From the account written by Heckewelder (1876: 229) we have the following testimony:

I have myself been benefited and cured by taking their emetics and their medicines in fevers, and by being sweated after their manner while labouring under a stubborn rheumatism. I have also known many, both whites and Indians, who have with the same success resorted to Indian physicians while labouring under diseases . . . I firmly believe that there is no wound, unless it should be absolutely mortal, or beyond the skill of our own good practitioners, which an

Indian surgeon (I mean the best of them) will not succeed in healing.

Zeisberger also refers to their ability to treat successfully different maladies, especially diseases peculiar to women. As for the present my informant lays claim to the curing of thirty-two persons during his sojourn in Philadelphia, for which he received no more regular compensation than voluntary gifts from persons of the underprivileged classes.

In assembling the botanic material presented here, specimens of plants were gathered in the wider Philadelphia area in company with my informant who explained at length their medicinal properties and uses. This collection was later supplemented by a few plants sent me by Wi-tapanóxwe from his home in Oklahoma. From time to time such specimens were submitted to Dr. John M. Fogg, Department of Botany, University of Pennsylvania, who very kindly checked their scientific identity. At the conclusion of the investigation a complete list of plant specimens was sent to M. R. Gilmore, University of Michigan, for comment of an ethnobotanical nature.

In the text, citations are indicated by the author's name and the date of publication to permit ready reference to the bibliography.

Delaware Medical Beliefs and Practices

THEORIES ON THE CAUSES OF DISEASE

THE DELAWARE, like so many preliterate peoples, share concepts of a similar character concerning the causes of disease (Clements, 1932). Certain maladies are attributed to the presence of some evil spirit in the body, which in turn is believed to be the work of a sorcerer; others are thought due to the patients' iniquities, while a few result from an encounter with an apparition. Failure to obey the laws of nature was the reason most frequently cited by Wi-tapanóxwe for the increase of disease among the Delaware. He said, in part:

In ancient times there was but little sickness among the Indians. The Delaware were greatly blessed because we always kept up our ceremonies and observed the rules of right living.¹ The Indian was healthy because he ate only clean, pure food and lived closed to nature. Then came the new people with their strange ways and food, and dreadful diseases.

Paraphrasing the statements of the informant, it is implied that with the onset and steady progress of Europeanization, the Indian was obliged to relinquish many of the ways of his accustomed mode of life. He was forced to seek new territories in order to escape the alien influences that were being forced upon him. Like the wild game, the Delaware fled to more remote regions because their former environment had become so thoroughly contaminated. At this time, it is said, the dwarfs and other non-human folk had safety and seclusion in the rocky cliffs. Certain plants no longer reproduced and grew. Those Indians who clung tenaciously to the teachings of their elders were greatly blessed by the Creator who guided them in visions as of old. From the conservative viewpoint of Wi-tapanóxwe, individuals of a weaker "intellect" were unable to cope with such adverse conditions and were swept away by the devastating effects of acculturation.

The following examples are typical of the ideas which the present-day Oklahoma Delaware express in their rationalization of the causes

¹ Reference may be made to a paper of A. I. Hallowell (1939) in which he has shown that "sin" is considered a potent causation of disease among the Saulteaux Indians of the Lake Winnipeg region.

of various maladies and physical deformities. Rheumatism, which the Delaware call by a term meaning "old people's disease," is attributed to unclean habits of living during youth. Scrofula is described by the Delaware phrase meaning "matter around the neck." If a person indulges in profanity, he may develop this condition.

It is said that congenital malformation rarely occurs among the Indians. Such physical abnormalities are attributed to the power of malevolent spirits which afflicted the child because of his parents' failure to fulfill tribal obligations by keeping up certain ceremonies bequeathed to them. Such a physical handicap, however, does not keep an individual from leading a useful life, for he is otherwise blessed. The informant added, "Sometimes the weakest person is chosen by the Creator to be powerful in mind. He does that as a matter of pity."²

Paralysis is said to be the result of an encounter with an apparition.³ If a person sees a ghost-like form approaching, he should step aside to avoid being stricken with paralysis. According to Wi-tapanóxwe, "an apparition in passing by is felt as a slight wind. Sometimes what appears to be a cloud is seen floating along the road and if allowed to touch a person, will cause a stroke." Occasionally a fire is observed to start at the bottom of a tree, blaze up to the top, and then disappear. The informant warned against attempting to strike at such a flame inasmuch as it would result in fatal sickness to the person or to a member of his family.

Wi-tapanóxwe related the following incident of a personal encounter with an apparition:

We were just young boys then, my brother and I, and we were riding home one afternoon just before sundown. As we rode along I noticed something in the middle of the road, and it seemed to be coming toward us. It had the appearance of a large animal but I could not see its form distinctly. Naturally, I was a little bewildered but I did not tell my brother what I saw. It seemed to come nearer and nearer to us but as we drew close, the thing disappeared suddenly into the woods. I asked my brother if he had seen the strange object but he replied that he had not. When we reached

² Delaware mythology reiterates the theme of the weakling child vanquishing his powerful opponents through the weapon of shrewd wits over brute strength.

³ Zeisberger (1910: 131) says in regard to apparitions: "Wandering spirits and ghosts, they claim, sometimes throw something into a public path and whoever goes over it is bewitched and becomes lame or ill. They even pretend to know where such a thing happened, learning it from the doctors who are thought to be able to effect a cure."

home I told my mother what I had seen and she warned us never to follow a ghost like that as it would lead us astray and finally to a pile of bones.

It may be of interest to note here that at times several people might see the same ghost and "feel" it pass by. Such an experience is always regarded as a warning, foretelling illness, death, or some sudden event. Children are cautioned against answering the call of an unseen person as it might prove to be a "ghost-whoop." Should a child answer such a call, his jaw would become dislocated or even his entire body paralyzed. Once a hunter answered such a "ghost-whoop," and upon trying to locate it, ran into a stack of bones.

The cause of insanity is attributed to the failure of a family to perform certain inherited ceremonials. Failure to continue such prescribed rites is punished by misfortune of some kind. Certain individuals are capable of exorcising people afflicted with this malady, the Indian name for which is translated as "lacking good sense." In one incident a young man believed that he saw a "mask" everywhere he went. His relatives finally resorted to a sweat doctor who entered the sweat lodge to ascertain the cause of the illness. After the ritual the doctor announced that it was due to their failure to perform regularly a ceremony which had come down in the family. In order to avert further trouble and to rid the young man of the disease, the doctor advised that the neglected feast and ceremony be performed, after which the patient became normal once more. Could anything be more in conformity with modern psychopathic practice than the preceding case? Other native terms which apply to people similarly affected are translated as "silly" or "half-witted."

I might also note that, having in mind the prevalence of the theory among the Cherokee (Mooney 1892: 322) and Muskhogean peoples of the Southeast that animals are the main cause of disease, I failed to find any evidence whatever in the mind of my informant of a similar belief among the Delaware.

IMPORTANCE OF THE DREAM VISION IN DELAWARE CURING

The dream vision⁴ is of paramount importance in the life of the Delaware. This supernatural visitation is experienced during child-

⁴Zeisberger (1910: 25): "To the dreams they appeal, for in them they have much faith." See also Harrington (1921: 61): "The most vital and intimate phase of Lenape religion is the belief in dreams and visions, and in the existence of personal guardian spirits or supernatural helpers—concepts of wide distribution among the North American tribes, but rarely, perhaps, so vivid or well-developed as we find them here."

hood, or less frequently, at the age of maturity. More commonly it occurs during the fast-vigil of a youth at puberty, alone in the forests searching for a spirit guardian (Benedict 1923). It is usually to such individuals, considered by the Spirit-forces to be spiritually and morally pure, that this great blessing is bestowed. The gift is not restricted to the male, but supernatural power granted to a girl is usually of lesser force. It is said, however, that women, through spiritual guidance, are more adept as a rule in the art of preparing and administering herb medicines than men. Occasionally a man has been blessed with a vision that gives him power to become an herb doctor. Wi-tapanóxwe became proficient in that field as will become evident in a subsequent narrative.

Not always is the revelation experienced in a dream. The neophyte may be walking alone in the woods, or even in a situation of apparent danger when the presence of the spiritual agent is made known to him. A voice from a rock, a bird, an animal, or even the sky is recognized as the medium through which the coveted power is conveyed to the fortunate one. Occasionally a song is granted to the novice during the visitation. This bequest is regarded as personal property to be used exclusively by the owner during participation in the ceremonies of the Big House, or in practicing healing with herbs, or in the sweat lodge.

To receive such a revelation from the Creator means much to a Delaware. It affords the assurance of spiritual guidance in all things, thus giving him confidence to go afield and to face whatever adversities may come into his life without fear.

To those whom the Creator has entrusted this great gift comes the full realization of the necessity of fulfilling certain obligations. The dream vision is not divulged until a man reaches maturity and comes to feel that he is capable of appearing before his tribesmen as one who has had sufficient experience in life to avoid incurring criticism in carrying out his ceremonial duties. The process of preparation is long and arduous, and during this period the novice must observe carefully the ways of his elders. The youth is instructed to be prayerful and humble in spirit since it is believed that only through prayer and faith are great things accomplished. Humility is the keynote of Delaware behavior even among those men and women who have attained the experience of advanced age. If one has lived a clean, pure life and has been faithful to the doctrines of his tribal religion, he shall indeed be called great—a man neither pompous nor boastful, but truly righteous, having a full realization of the joys and blessings which come to those who are ever mindful of the Creator.

Some of the more spiritually inclined are known to have had more than one vision, as in the case of Wi-tapanóxwe whose first revelation came in his youth, the second later in life. If one has had several visions he usually is guided by the first, but in any event he is free to choose according to his spiritual needs. After such a decision is made, however, the individual continues to adhere to the guardian selected throughout the remainder of his life.

Having lived according to the precepts of his native faith and achieved the age of mature experience, the informant was not averse to making known the spiritual power revealed to him during two dream visions. His recitation and song have been fully given in text in Speck 1931: 128, 168. Now he was ready to take his place in the Big House Ceremonies and in the sweat lodge, but prior to the recording of his vision he was felt inexperienced and unworthy of appearing before his kinsmen in a ceremonial role.

The following is presented in the words of Wi-tapanóxwe and is self-explanatory:

It was while attending school at Chilocco, Oklahoma, I was taken sick with the black measles. The authorities were alarmed, thinking that it might be scarlet fever and more than a hundred of the pupils were removed to the local hospital and placed under quarantine. It was during that time that I had my trials and tribulations. The summer before, Mr. Wright, a noted evangelist of part Choctaw descent, had visited the school and held revivals. So many were converted that I too thought that I was fully converted and was persuaded to say that I had accepted Jesus Christ for my personal Savior. But now came the real test. I was one of thirty patients in a first floor ward and read the Scriptures constantly.

The attending nurse had an aged father who often told us that he had served in the Civil War. During that time he had the measles but he did not even go to bed. He was assigned to look after the personal needs of the patients in my ward and he soon tired of his duties. He would try to force us out of bed and called us all kinds of ugly names. He was more profane than any white man I had ever seen. We were not allowed to drink cold water to cool the high fever of the dreadful disease but were compelled to drink a weak solution of cayenne-pepper tea to quench our thirst. Of course that alone was bad enough but the disagreeable old veteran made matters worse.

His actions so disgusted me that I decided since I was feeling on the mend, to get up and put on my clothes.

Unbeknown to either the doctor or the nurse, I got up and attended to the patients, giving them medicine as I had done many times before. It was in the month of February, the sun came out warm, but there was still a little scattering of snow on the prairie. Having finished my tasks I went out on the south side of the building and stood in the sunshine for a few minutes. Although I was wearing an overcoat, cap, and overshoes, the exposure, which I thought was harmless, nearly caused my death, leaving me weak for many years. Fortunately I pulled through—weak but determined to live.

This is the first time I have related my experience with the so-called white man's religion. That evening before five o'clock I was taken sick and went back to bed again. The doctor and nurse did not know that I had been up but the sudden rise in my temperature alarmed them greatly. I was delirious the greater part of the time for more than seven days. So they decided to notify my parents who lived some eighty miles away. It was at this time a vision came to me and accompanied me around the world. At times it seemed as though we were not on earth. This man spoke the Delaware language and he showed me many of the Indian ceremonies, some of which I had never seen or heard before. He showed me men and women who had departed this life many years before, and told me their names.

When at times I would awake from what seemed only a short nap, I would find myself talking to my mother who was at my bedside constantly. To my sorrow I found out that many of my comrades were worse off than I. It was here that I fully realized that the teachings of my mother had been so deeply impressed on my mind. This experience turned me back to the Delaware Big House.

So it happened that years later, after worrying about my careless life at home in Muskogee, these same strange visions came and spoke to me from mid-sky and gave me a song. They seemed to be four in number and were not earthly persons, but belonged to the sky. It was then they came to tell me what my mission on earth was to be. Since everyone has a purpose in life, mine was to heal the sick. Whenever I dreamed a secret I told my mother and she told me to keep this to myself until I became older. Now as I get older, I feel that I shall be better known in years to come. I am confident that my dream-vision power will bring me success throughout life since the Creator does not abandon his children to whom he had entrusted such gifts. By this I have learned to work out my own salvation, knowing that the Indian wholly depends upon the talent allotted to him by the

Creator. These experiences fully qualify me to lead in the Big House if I choose to do so. My brothers do not know this but they suspect that I have a vision to relate. Some day they may have the pleasure of hearing it when the opportunity offers.

DELAWARE PRACTITIONERS

A Delaware herbalist is to be classed⁵ as either "one who knows [medicine] well," or "one who uses medicine for magic purposes."⁶ It is believed that to the former is entrusted the knowledge of the healing properties of plants as well as the methods of preparing and administering them as medicine. These practitioners are usually women, but occasionally a man is blessed with a vision⁷ in which the Creator bestows upon him this great gift, and like Wi-tapanóxwe, he becomes an herbalist. In addition to the knowledge of healing acquired through his guardian Spirit,⁸ the informant has also followed carefully the teachings of his mother who was recognized by Delaware of the older generation as one adept in the art of compounding and administering herbal remedies.

⁵ Heckewelder (1876: 228) refers to the herbalists as "physicians and surgeons" and says in part: "By these names I mean to distinguish the good and honest practitioners who are in the habit of curing and healing diseases and wounds, by the simple application of natural remedies, without any mixture of superstition in the manner of preparing or administering them." Zeisberger (1910: 24) does not classify the Indian doctors, but writes, "There are Indians who have considerable knowledge of the virtue of roots and herbs, learned from the fathers, and who bring about relief."

⁶ Heckewelder (1876: 231). Heckewelder, in discussing practitioners of this type, has chosen to call them "doctors or jugglers." "These men are physicians," he says, "like the others of whom I have spoken, and like them are acquainted with the properties and virtues of plants, barks, roots, and other remedies. They differ from them only by their pretensions of a superior knowledge." According to Heckewelder, "the Indians in general believe in witchcraft, and ascribe . . . to the **arts** of sorcerers many of the disorders with which they are afflicted in the regular course of nature, this class of men has risen up among them, who pretend to be skilled in a certain occult science, by means of which they are able not only to cure natural diseases, but to counteract or destroy the enchantments of wizards or witches, and expel evil spirits."

⁷ Zeisberger (1910: 25): "Fancied skill and imagined ability to heal the sick are traced to dreams which these individuals may have had in their youth. To the dreams they appeal, for in them they have much faith." See also Speck 1931: 51; Harrington 1921: 61; and Benedict 1923.

⁸ Harrington (1921: 80), quoting from the notes of R. C. Adams: "It is believed by the Delawares that every one has a guardian spirit which comes in the form of some bird, animal, or other thing, at times in dreams, and tells them what to do and what will happen. The guardian spirit is sent from the Great Spirit."

The second class is composed of individuals whose supernatural power enables them to perform such acts as reuniting an estranged couple or dispelling a supposedly evil charm. Certain rare plants are employed by them in practices resorted to only in emergencies.

It must be emphasized here that, according to Delaware belief, the practitioners are the media through whom the Creator sends his healing power to alleviate distress caused by the physical and mental ills which attack the frail bodies of mankind.

Absolute faith in the unfailing power and benevolence of the Creator is the force which inspires the Delaware who has been blessed with a medicine vision and he is ever appealing in prayer to that higher Spiritual Force for aid in his professional undertakings.

Believing that plants and animals in general are closely related to mankind⁹ and that the Creator has endowed them individually with spiritual natures equally as sensitive as our own, the Delaware herbalist is always careful to perform the former propitiatory rites before gathering a plant or removing part of an animal for use in making medicine.

If a practitioner is called upon to treat a person during the growing season in spring or summer, his first move, after the formal acceptance of the case and receipt of a gift of tobacco, is to go out and seek a plant of the desired species to be used in making medicine for the treatment of the particular ailment. After coming upon the first plant of the variety required, he does not gather it¹⁰ but performs a ritual to appease the Spirit of the plant. A small hole is dug towards the east near its base and a small quantity of native tobacco¹¹ placed within. The herbalist then lights his pipe and smokes, meanwhile making the following appeal to the Creator and to the spiritual forces which govern vegetation. The songs and properties are regarded as personal property and the accompanying medicine-gathering prayer of Wi-tapanóxwe is regarded as typical.

⁹ Speck (1931: 28, 29) discusses the principle of consanguinity as applied to deities and nature-forces.

¹⁰ Harrington (1921: 26), in reference to the *manitowuck* to whom the Indians pray, says, "These are mentioned in the ritual of the Annual Ceremony, and the people often pray to them when gathering herbs or preparing medicines, at the same time offering tobacco." He also says (1921: 51) that "Some seem to have prayed . . . to the four directions, others to the presiding genius of the species of plants they sought, or to the spirit of the individual plant itself."

¹¹ "Real tobacco" (*Nicotiana rustica*), to which a Delaware term meaning "our grandfather" is also given.

MEDICINE GATHERING PRAYER (Free Translation)

Grandfather, I come now for medical treatment. Your grandson (name of suppliant) needs your aid. He is giving you a smoke-offering here of tobacco. He implores you that he will get well because he, your child, is pitiful. And I myself earnestly pray that you take pity on him the sick one, I wish for him to get well forever of that which is causing pain in his body. For with you alone rests the spiritual power sufficient to bless anyone with, and hear now him our Grandfather tobacco, I beg of him that he will help me when we plead with earnest heart that you will take pity on your grandchild and that you will accept this appeal. I am thankful, Grandfather, also Creator, that you grant our appeal this day for all that we ask.¹² I am thankful, Grandfather. That is enough for this time.

Upon the conclusion of this propitiatory rite the medicine person searches out another plant of the same species, which if clean and healthy-looking, is then gathered. It is now ready to be treated in accordance with the rules governing the preparation of roots and herbs in the accompanying pharmacopeia. If the root of a plant is to be used in making medicine, it is gathered at the season when the vital properties are present; similarly the stalk or leaves each are gathered at the proper seasons.

The herbalist, before using herbs previously gathered and dried, performs the same rite of smoking and prayer. If the plants are being gathered for future rather than for immediate use, an appeal is made to the Creator to bless the plants and render the remedies effective in curing the future ills of his grandchildren.

The custom of offering prayers before the gathering and preparation of medicinal plants is not observed exclusively by the medicine men but is known to every Delaware. However, it was remarked that many fail to adhere to the ancient rite.

In observing Wi-tapanóxwe I was charmed by the delicate and reverential manner in which he handled the plants secured and arranged for this study. At this time he emphasized the idea of conservation, stating that one should gather only what was needed and that vegetation in general should not be subjected to ruthless treatment.

Purity means much to the conservative Delaware and so the pure plants, as taken from Mother Earth, must not be defiled. It is therefore

¹² The proper phrase in full is "give us what we ask for." It is abbreviated here to suit the formula.

important that in order to avoid contamination, no metal should come in contact with plants that are to be used in the treatment of disease. Roots and plants are allowed to dry in the sun, its rays lending them added potency. In this connection it is considered highly beneficial for a convalescing person to lie directly in the sun, so that its strengthening qualities may be transferred to him. After the process of curing, roots and leaves are prepared by crushing them in a non-metallic receptacle, a stone basin or a wooden mortar being used for the purpose.

The herbalist smokes and offers a prayer while the medicine is being prepared and is always careful to stir it in the same direction—from left to right. One should never blow upon the concoction to cool it; to do so would represent an affront to the spirit of the plant.

The most able practitioner will not treat himself when ill, nor a sick member of his family, but always calls upon the service of another.¹³ If an herbalist or sweat doctor, after diagnosing a case, feels that it is beyond his power to effect a cure, he will send the patient to another more capable of treating him successfully. Sometimes a sick person will visit several doctors in succession before finding one who has knowledge of preparing a remedy for his particular illness.¹⁴

The person, either male or female, known by the term meaning "one who uses medicine for magic purposes," apparently had a larger number of patients in early times than the type of practitioner previously described. Zeisberger (1910: 25) and Heckewelder (1876: 231), from whom this impression is obtained, give rather detailed accounts of their seemingly weird practices. Both writers attribute the popularity of this group of healers to their feigned ability of dispelling the charms of evil sorcerers whom the Indians constantly feared. Wi-tapanóxwe clarified the distorted impressions implicit in these accounts by his interpretation of the procedure employed in treatment.

¹³ Zeisberger (1910: 25): "If one should know enough to help himself, being able to prepare *Beson*, and became ill, he will rarely treat himself, having the superstitious belief that what is prepared by himself will be of no benefit. Using what has been prepared by another, he believes, will bring relief."

¹⁴ Zeisberger (1910: 55) states that "Concerning plants and roots of medicinal value, it would be possible, if one were to devote himself to inquiry, to secure a great deal of information from the Indians, for what one of these does not know another does, each man and woman having some knowledge in this direction, some more, some less. Hence, the custom that a patient who has consulted an Indian and secured a medicine from him without, however, being benefited, will go immediately to another; if no relief is obtained through his advice, the patient goes to a third, a fourth until he finds one whose medicine helps."

The herbalist was called upon to aid individuals who had experienced difficulty in their marital relations or who had tried unsuccessfully to win the favor of a lover. Others came to him to be freed from malevolent influences. His power was not, however, limited to the control of human beings, but extended to animals as well. Such a person was truly a "powerful man." This great power was entrusted with the admonition that it must never be used for malevolent purposes. Like the group of practitioners previously mentioned, the code of such people was based upon profound faith in the Creator, strict observance of the laws of nature, and a deep regard for the traditions of their tribe.

The plants employed by such an herbalist were of the rarest and most powerful kind. Their habitat and medicinal properties were not known to ordinary individuals. Such plants were unable to withstand the progress of civilization because, as my informant put it, "they could not live in unclean surroundings." The preparation made from these rare flora was known to the Delaware as "medicine for magic use," or "love medicine" (Zeisberger 1910: 83). It was regarded as a gift, not to be used upon ordinary occasions but only in cases of emergency.

LOVE CHARMS

Certain peoples, however, learned long ago to employ medicine of this nature for evil purposes, frequently to gain influence over women. In such instances it was called "love medicine for gaining influence,"¹⁵ or "witchcraft."¹⁶ The following test and prayer were given by Wi-tapanóxwe as characteristic examples of the correct procedure to bring about the reconciliation of an estranged marital couple.

At the present time the "love-doctor," usually a woman, employs two varieties of roots for the magical rite. One is known by the term "flower hangs down,"¹⁷ the other merely as "pull-up." A portion of the first variety is broken into three small pieces, which are laid upon the outstretched palm of the practitioner's hand. These represent the three individuals involved in the ordinary triangular affair, the peti-

¹⁵ Zeisberger (1910: 126) refers to the introduction of a poison (witchcraft) called "*Mattapassigan*" by the Nanticoke. See witchcraft, p. 45 ff.

¹⁶ According to Wi-tapanóxwe this term applies to the act of attempting to gain influence for legal or illegal purposes by means of the medicine which is said to have magic qualities. The shaman who practices his profession for evil is also referred to as one "who practices for evil."

¹⁷ *Podophyllum peltatum*, May apple.

tioner in the center, the spouse or sweetheart to the right, and the third party to the left. The other palm of the practitioner is then rubbed lightly over the roots and their movements closely observed. The side towards which the middle piece is seen to move, indicates the person with whom the petitioner is in love. The test may not be made more than once a day—"one test a day"—but successive attempts over three or four days are permissible. The "love-doctor," after offering some of the tobacco given by the petitioner, attempts through her supernatural power, aided by prayer, to bring about the reconciliation of husband and wife, or true lovers. She can however be employed to separate a married couple or two lovers, a practice characterized by the informant as "bad." The practice is only employed in the case of serious misunderstanding between husband and wife, one of whom strives in this way to effect a reconciliation. The other is not informed of the trial.

PRAYER USED IN PREPARING THE LOVE CHARM (Free Translation)

Grandmother, I beg of you that you will help your grandchildren to reconsider each day. They are in trouble so I sacrifice to you this tobacco, our Grandfather, in order that you will help that man, Big Bear and that woman, Small Person, to forget their troubles.¹⁸ Because, Grandmother, it has been many years that they have been together. Again, Grandmother, I implore you because it is right that they should love each other henceforth. If you accept my plea, in two days from this time the woman will go back.

The second variety of magical root, termed "pull up," is employed in the following manner. The informant's maternal grandfather transferred to him the secret of such a medicine gift in order to control human beings or animals. Although the root is intended primarily for use in hunting, it could also be employed to coerce or in general influence people favorably. I was unable to secure a specimen of this "rare" plant for scientific identification.¹⁹ Wi-tapanóxwe described the plant root as having "five prongs." After securing several of the plants, the roots are prepared by cleansing them thoroughly in running water, to the accompaniment of songs and prayers. Three branches of the

¹⁸ "Being in trouble."

¹⁹ This is probably due to the supposed magical properties attributed to this plant, making it dangerous, according to Delaware belief, for persons other than practitioners to handle it. This applies to all other plants used for magical purposes.

plant root are then broken off and another, taken from the root of a plant of the same species, attached to the remaining two, to make three. In this connection it may be noted that the emphasis upon the number three in this and the previously described love charm represents a symbolism for which the informant could offer no explanation.

In use, a small quantity of the prepared root is chewed three times a day. The juice resulting from the first mastication is rubbed on the hair, that from the second and third is swallowed. Such a procedure will bring about the desired result in a short time. To lure game animals some of the root is chewed while hunting. Wi-tapanóxwe related an incident of holding some of these roots in his hand while singing his medicine song, and thus luring a squirrel very close to him. The root is so powerful that if an excessive amount of juice is swallowed, the person's mind will become affected.

FOOD TABOOS

After he has diagnosed the case, the practitioner prescribes a curative diet²⁰ for the patient, the food restrictions being determined by the nature of the disease. The flesh of animals and fowl is excluded from the diet and in the case of fever, red or fox squirrel flesh is not eaten. This food taboo is known to the Delaware by a native word meaning "makes you sick." Corn hominy, however, is administered in most cases, as it is considered to be a nourishing food.

In the case of childbirth, salt is not eaten for ten days. Onions are given the mother to produce milk, but care must be taken not to use a quantity such as to cause nausea for the child and mother.

During the catamenial period a woman is not allowed to prepare food nor take an active part in domestic affairs.²¹ The separate dishes assigned to her at that time may only be used by her husband. Food cooked by such a woman would produce tuberculosis in others in a short time. A term translated as "gives dirty food" is applied to such a practice and refers to the resultant poisonous effects. During her periodic isolation a woman herbalist must refrain from preparing remedies or participating in any of the ceremonies.

²⁰ Barber (1856: 538) quotes the following from William Penn's letters: ". . . if they eat flesh it must be from the female of any creature." See also Zeisberger 1910: 24.

²¹ The puberty ceremony for young girls and the periodic isolation of women is described by Zeisberger (1910: 75-77).

DIVINATORY CURING PRACTICES

Certain acts of a divinatory nature are performed upon selection and preparation of plants, roots, and bark employed in making medicine. Only plants that are clean and well developed, with the roots free from knotty growths, are taken. When seeking bark the medicine gatherer selects a sturdy, well-formed tree for the purpose. The bark growing on the east side of a tree is preferred for its greater strength-giving properties received from the morning sun.

In gathering medicinal supplies, the materials are inspected for a clue as to the course of the treatment. Thus, if roots appear rough and knotty, the patient will be difficult to cure; if clean and well-formed, it will be an easy task to restore his health. Another practice is to place some crushed leaves or roots in running water. If the substance sinks to the bottom of the stream, the patient for whom it is prepared will die; if it floats, a speedy recovery is assured.

When all other remedies have failed, an emergency medicine is sometimes made from scrapings of deer antler. During its preparation a prayer is offered to the animal from which the antler was obtained. Wi-tapanóxwe related an incident in which a trial was made by means of this substance. His niece was preparing it for a small child who was dangerously ill. She dropped a small quantity in a cup of hot water and observing it settle to the bottom, knew that the small patient would not recover. The medicine was administered as a tea, but the child died in a short time.²²

In the making of an emetic, the necessary water should be dipped from the stream *with* the current;²³ for a cathartic, it should be dipped *against* the current. A similar regulation applies to the gathering of bark: for use as an emetic, the bark is peeled upward, for a cathartic downward.

Formerly there were among the Delaware, as among the other tribes, certain men and women whose supernatural power enabled them to communicate with the dead, to locate lost persons and objects, and to foretell coming events. This practice was known as "locating or foretelling," and one who possessed such power was known as a "man who tells of the future." The source of this extraordinary power was at-

²² In reference to remedies for fever, Zeisberger observes (1910: 55) that "When a patient has been given a dose, they are generally able to tell from its workings whether he will recover or die. If he does not retain the medicine, it is regarded as a sign that he will hardly recover."

²³ This practice was noted by Heckewelder (1876: 224).

tributed to one's guardian spirit or in some instances to the spirits of the dead. Those who were able to communicate with the dead usually performed at night. Such a person was also thought able to cure paralysis.

Some individuals who possessed the power to stay under water for a period of several hours at one time were frequently called upon to locate a drowned person or a submerged object. One man was known to have found the body of a drowned person after months of futile searching by others. Some years later, the son of this shaman, after becoming converted to Christianity and studying for the ministry, finally persuaded his father to abandon the native faith and join the Christian church. In doing so the old seer, forsaken by his supernatural guardian, forfeited his magical power. Later the old man returned to the Delaware religion, but the power which enabled him to be of service to his tribesmen was gone forever.

Wi-tapanóxwe's grandfather was one of the last of the Delaware to possess such extraordinary mental and physical powers. He was able to perform the submersion feat and several times located the bodies of persons who had drowned in the rivers of Kansas. On one occasion a team of horses which had broken through the ice was rescued through this same ability to remain beneath the surface of the water for a considerable period. Power for this ability was given him by a teal duck which appeared to him in a dream. In the informant's words:

When a boy, my grandfather always went swimming every morning before sun-up, even when there was a thin coating of ice on the river. One time he dreamed of going down to the ice-covered stream very early to bathe as usual. When he jumped into the water the echo could be heard down the river. Then suddenly he heard a voice saying to him, "I am going to make you a strong man. You will be able to go under the water as I do." He did not see anyone around but there close by was a teal. And he could go down under the water and get fish, too.

So close was the connection of divination with the spiritual realm that the Delaware noted carefully the last words of a person near to death. At such a time the dying one is believed to be in close communication with the souls of the departed, who may impart messages of great importance through this medium to the living. One aged woman while on her deathbed spoke as follows:

My kindred, we have been wonderfully blessed. We have enjoyed the gifts which the Creator bestowed upon us. That is

because we have kept our own religion and observed the teachings of our elders in all things. If you continue to do this in the future, you will not be subjected to the evils which increase as civilization increases. Do not give up your own religion.

Another old woman foretold the coming of the railroad twelve years prior to its appearance, while a third foresaw the granting of citizenship to the Indians twenty years before its occurrence.

THE SWEATING RITE

The importance of the sweat lodge ritual, as carried out by the Delaware for the purpose of spiritual and physical purification, is attested both by early observers²⁴ and by more recent students.²⁵ According to Zeisberger, in his discussion of the Delaware customs, the practice was attended by rather elaborate rites and was evidently regarded as one of the major ceremonies. It was performed in honor of fire, being called *machtuzin*, a term meaning "to perspire," according to the same writer's translation. A similar rite is described by Harrington, whose informants named it *muxhat'olzing*. This is recorded as a variant of the Annual Ceremony.

In examining the various accounts of this rite, both in published and manuscript form and through correspondence and verbal statements, it is evident that what was originally a highly developed ceremony performed in honor of the Creator, to whom appeals were sent through various media (such as fire, tobacco, water, etc.), has been modified to a great degree by the introduction of alien features and the abandonment of certain elements to meet the requirements of individuals. The latter would apply both to the practitioners and to those who sought treatment for physical and mental ills.

The benefits, according to one early writer (Heckewelder 1876: 225), which were derived from the sweat lodge ritual, were numerous and varied. He writes:

The sweat oven is the first thing that an Indian has recourse to when he feels the least indisposed; it is the place to which the wearied traveller, hunter, or warrior looks for relief from the fatigues he has endured, the cold he has caught, or the restoration of his lost appetite.

²⁴ Zeisberger 1910: 138; Heckewelder 1876: 225; Loskiel 1794, pt. 1: 108-9.

²⁵ Harrington 1921: 122-126; Speck 1931: 72-74.

Reference to the works of Zeisberger²⁶ and Loskiel²⁷ indicates that it was customary for individuals to resort frequently to the public sweat lodges.

Wi-tapanóxwe stated that formerly the sweating rite, as a part of the annual Big House Ceremony (Speck 1931: 74), was performed to test the spiritual and physical strength of certain men, usually warriors. A lodge was built within the Big House and the men went in to pray and to recite their visions. Those who could withstand the heat for the longest period were regarded as possessing the greater power for war, and for curing. Information (correspondence, November, 1930) of a negative character as to the ceremonial aspects of the rite was obtained from J. A. Parks, of Copan, Oklahoma, who wrote, "The sweat lodge was not a ceremony. It was a method of treating the sick with sweat baths and hot breaths of air by the Indian doctors."

This brings us to a consideration of the rite as it is performed by the Delaware sweat doctor today. In the account dictated by Wi-tapanóxwe, there is evidence of the survival of many elements, originally attached to the earlier form but subsequently incorporated into the formal procedure within the lodge for the purpose of diagnosing and treating sickness.

The term applied to the sweat house healer is one meaning a "sweat doctor." He always performs within the lodge when asked to examine or treat a patient. It is interesting to note that my informant, Wi-tapanóxwe, and Charley Elkhair, the present head chief of the Oklahoma Delaware, claim the distinction of being the only men among the Oklahoma Delaware who have supernatural sanction to perform in this capacity. The former believes that he is privileged to assume the role which his people consider appropriate only for men whose minds and characters have been strengthened by years of experience, but up to the present time (1930) he has not attempted it. The powerful shamans²⁸ of an earlier period were said to have been able to

²⁶ "It is a custom of the Indians, even when they are tired or have caught cold, to go into a sweating oven several times a week. For this purpose every town has on its outskirts a sweating oven." (Zeisberger 1910: 26)

²⁷ Similarly, this writer (Loskiel 1874, pt. 1: 108) states that the Delaware "have in every town an oven, situated at some distance from the dwellings, built either of stakes and boards covered with sods, or dug in the side of a hill, and heated with some red-hot stones."

²⁸ In Delaware the term used means "powerful man," "man who can heal," and refers to a type of shaman, called *medeu* by the Delaware of an earlier period, especially concerned with curing. Among the Chippewa (Densmore 1929: 86-97) the *mide* were the leaders of the *mide'wiwin* or Grand Medicine Society. See also Hodge 1912: 523.

perform miraculous feats and effect marvelous cures without the aid of the sweat lodge, although it was frequently employed in their practices.

Both of the above types of medicine men receive their power from the Creator through dream visions, the spiritual visitation occurring usually just before sunrise or sunset. The vision is accompanied by a medicine song, which becomes the personal property of the healer, to be sung during performances in the sweat lodge. It is said that women rarely become sweat doctors. Wi-tapanóxwe, since his vision and medicine song were received just before sunrise, considers that as the time of day during which he would be most successful in curing activities within the sweat lodge. Those who received their power at sunset accordingly regarded that as the most suitable time for performances.

Contrary to the herbalist's custom of not accepting gifts or payment for his services, the sweat doctor expects payment from those who approach him for consultation and treatment. In former times trader's trinkets, etc., and somewhat later, horses, blankets, and money were given by those requiring his services.

The construction and equipment of the sweat lodge are matters of considerable importance in this particular type of curing. It is built of twelve poles which represent the twelve levels of heaven (Speck 1931: 74) and, according to native belief lead to the abode of the Creator. For this purpose saplings chosen for their flexibility are cut into lengths averaging from six to eight feet. The end of each of these poles is pushed into the ground to form a circular outline, five or six feet in diameter, with a somewhat wider space marking the entrance towards the north or south. The opposite ends are then bent over and lashed down to form a dome-shaped structure, over which skins, mats, or blankets are laid. The fire, located in the lodge center, is built of twelve logs of hard wood. Neither driftwood nor wood obtained from a tree struck by lightning are suitable for this purpose. The use of the former, known as "gathered together by water," would tend to cause a flood. Fuel taken from a tree struck by lightning is termed "thunder burned wood"; its use in the sweat lodge, thus angering the Lightning Spirit, would cause a severe storm.

The native doctor may employ any person to assist in building the fire, carrying rocks and water, or arranging mats of Indian hemp and bark for the pallet upon which the patient is laid. The latter is covered with skin robes or blankets so that only his head is exposed. After the fire has burned down sufficiently to form a bed of coals, more logs

are added and the rocks, usually limestone, brought in. Twelve stones of medium size are placed in the fire. For handling them, a branch of hickory or any hard wood, about five feet long, is split at one end for use as a fork. After the rocks have been thoroughly heated, water is poured over them to produce steam. The doctor prays and sings for a period of time determined by the nature of the sickness and the strength of the patient. His song at this time is the narration of his dream-vision experience made as an appeal to the Creator and his supernatural guardian. Although the emphasis in this type of treatment is upon mental suggestion, in some instances tea made of herbs is administered by the doctor.

In addition to the lodge, poles, fire logs and steam rocks²⁹ grouped in units of twelve to conform with the twelve levels of heaven, symbolical significance is also attached to fire, water, and stone. These are regarded as minor deities, often referred to in terms of human consanguinity (Speck 1931: 32), and possessed of great healing power. Besides its specific name, the term "our Grandfather" is applied ceremonially to fire. Rocks are also known as "our Grandfathers." Water is regarded as a powerful spiritual force and is known as "our Mother."

Some cases of illness can be cured in one treatment while in others it is necessary to hold several meetings in the sweat lodge. The latter is known by a term meaning "temporary sweating." New stones are secured for each treatment. It is considered advisable to let one or more days elapse between treatments, as determined by the physical condition of the patient. The latter is occasionally massaged by the doctor, who first warms his hands upon a hot stone before rubbing the affected area. Often it is necessary also for the healer to blow hot or cold air upon the patient. For the first the shaman's breath is warmed by means of a hot drink. In Delaware terminology this is known as "warm breath." In case of fever or exhaustion the "cooling breath" is used. One doctor had so much supernatural power in this respect that his breath would cause a swelling wherever

²⁹ Brinton (1888: 40-41), in writing of the survival of curing rites among the Ontario Delaware, states: "I inquired particularly if there are any remnants of the curious adoration of the sacred twelve stones, described by Zeisberger . . . I found that the custom of the 'sweat lodge,' . . . still prevails. The steam is generated by pouring water on hot stones. This is done by the 'medicine-man,' who is known as *quechksa'piet*. He brings in one stone after another, and pours water on it until it ceases 'to sing;' and invariably he uses precisely *twelve* stones."

it struck the body. It was therefore necessary for him to exercise great care in this type of treatment to avoid bringing undue discomfort to the patient.

Following the ritual performance in one of the Delaware peyote cults, it is customary at the present time for the participants, both men and women, to go into the sweat house (Petrullo, 1934: 95). This usually occurs before sunrise. The sweat house for this assemblage accommodates about twenty persons. The equipment is precisely the same as for the performance previously described, but there is no ritual connected with this performance. Men and women enter together and drink hot water to induce perspiration. In case of nausea they chew "Osage tobacco" (wild sage) and swallow the juice. This plant, according to my informant, has a very strong taste together with astringent qualities. The sweating period is followed by a plunge.³⁰

THE MEDICINE BUNDLE

The existence of the medicine bundle complex³¹ among the Delaware has apparently escaped the notice of recent investigators in the field of Delaware ethnology. Both Harrington (1921: 36, 42, 49, 65-66) and Speck (1931: 42) mention the use of personal and tribal fetishes, but omit any reference to the bundle concept as such. This is doubtless due to the deeply religious convictions of the informants who regard such objects as too sacred to be displayed or discussed in the unclean environment in which they must perforce live. It was not until the conclusion of the work that I learned of my informant's ownership of a medicine bundle. He was reticent about speaking in detail of its contents, but inferred that it was made up of personal charms and medicines.

³⁰ This is comparable to the semisocial aspects of the rite as described by Heckewelder (1876: 225-226): "Those sweat ovens are generally at some distance from an Indian village, where wood and water are always at hand. The best order is preserved at those places. The women have their separate oven in a different direction from that of the men, and [are] subjected to the same rules. The men generally sweat themselves once and sometimes twice a week; the women have no fixed day for this exercise, nor do they use it as often as the men." He also states: ". . . the public cryer going his rounds, calls out *Pimook!* 'go to sweat!' every one brings his small kettle, which is filled for him with the potion, which at the same time serves him as a medicine, promotes a profuse perspiration, and quenches his thirst."

³¹ A term meaning "gathered together," used in speaking of the Medicine Bundle, refers to objects forming a collection intended for magical practices.

While the use of the medicine bundle among the Delaware is not accompanied by the highly developed ritualism observed by the Medicine Bundle societies³² of the central Algonkian tribes and others in adjacent areas, there is a sample code, characteristic of the trend of Delaware religious thought, to which the owners of the bundles adhere.

The Delaware bundle is said to contain sacred articles which are assembled in accordance with injunctions laid down by one's spiritual guardian in a dream vision. In addition to pieces of roots for use in concocting secret formulae, a bundle usually contains personal tokens such as a bird claw, a feather, a piece of bone or horn, an animal tooth, a magic stone, or emergency gift.³³ One man may have several or all of the articles enumerated while others possess only one. Each case is of course determined by the supernatural experience of the individual. For example, men of the warrior class carry, besides their individual charms, some particular medicine prepared for the exclusive use of warriors.³⁴ Hunters carry an animal lure also prepared from a formula handed down from older generations and carefully preserved. The bundles of the herbal practitioners and sweat doctors contain portions of rare roots and plants used in their healing practices. These different sacred objects are wrapped in buckskin or cloth to protect them against exposure to unclean surroundings that might tend to defile such objects of sacred authorship.

The way in which such supernatural tokens are obtained by their owners is illustrated by the following. Once a man dreamed of seeing a plant, called by the Delaware "frost" or "ice weed." He heard a voice which said to him, "I am strong and great. Stronger than any other plant because I stay green longer in the fall. Use me and I will make you strong." The man then went out and obtained a specimen of the plant for his medicine bundle. In another case a boy saw a horned toad in his vision and knew that it was to be his guiding spirit. He went out in search of a horned toad and finding one, picked it up, saying, "Give me your horn." At the command the toad gave the youth his horn which the latter kept until an old man.

The medicine bundle is the most highly cherished material possession of a chief, warrior, or medicine man. He may possess one or more

³² This engrossing subject has been dealt with in detail by Skinner (1913: 91; 1920: 168, 266); Hoffman (1896: 75); Densmore (1929: 93); Wissler (1912, 1916); Lowie (1924a: 335ff).

³³ See medicine stone, p. 26.

³⁴ See warrior's medicine, p. 41.

bundles, which he has the privilege later of bestowing upon another. This seldom occurs until a man has reached an advanced age, the period at which he feels inclined to transfer his power and supernatural tokens to a younger man. The person chosen to be the recipient of this sacred gift must be spiritually and physically clean. He is called into conference with the older man several times before the actual transfer is made. Then it is given to him with the admonition that he must use the power wisely and keep the bundle from defilement to avoid forfeiture of the sacred gifts. At times medicine bundles are not transferred through the lack of a youth competent to deal with matters of spiritual import. In such a case the bundle is buried with the owner. Or, at the request of the owner, a bundle is given to a relative or to one of his own class, i.e., a doctor or a warrior. Among the Delaware, medicine bundles are never sold.

Medicine charms are believed to be extremely potent in the hands of their owners. A man may commune with his guardian by means of these material agents and thus secure spiritual guidance and aid in regard to problems of a wordly character. Thus the medicine man seeks knowledge during his diagnosis of the often perplexing cases brought to his attention; the hunter, his mind filled with a keen desire for success in the quest of game, concentrates on the token of his supernatural helper during his appeal to the Giver of Game through prayer. Similarly, the warrior desires information as to the location of the enemy; the chief seeks for a clearer insight into tribal affairs in general.

So powerful are these agents of the spirit forces that if one speaks to them against his enemies, he will have the power to attack the latter by means of practices of a malevolent character. Such power is considered as basically evil and to be used only as a last resort. Supernatural power, in general, is believed to be given to the Delaware to accomplish good and not for matters of minor importance.

THE MEDICINE STONE

A concretion secreted in the alimentary organs of certain ruminants is known to have been highly prized by the peoples of Europe and the Orient³⁵ for its alleged magical and medicinal properties. This unusual object is also known to and valued by the natives of the New World.³⁶

³⁵ See article "Bezoar" in *New International Encyclopedia*, Vol. 3. Second Edition, 1924.

³⁶ I am indebted to Dr. John M. Cooper, Catholic University of America, Washington, D. C., for access to his manuscript on *The Bezoar in Aboriginal American Culture*.

From the present-day Delaware, we have the following information on the medicine stone, one of their most sacred and invaluable possessions. It is comparable to the bezoar stone of Oriental fame and usually has a similar function—as an antidote for poison. Although such objects are known to be present in the digestive organs of different animals, that obtained from the blacktail deer (*Odocoileus hemionus*) is considered as the most potent variety. The Delaware call such a stone by the term meaning “emergency gift.” From its use in rubbing a wound made by a snake or mad dog, it is sometimes known as “mad stone.” They are of varying shapes and sizes and serve as protective agents for their owners. One may use such a charm to make medicine for another who is seriously ill or injured. In the case of illness pronounced fatal by others, scrapings from the medicine stone are infused in hot water and administered as a tea. Complete recovery of the patient is expected as a result. Wi-tapanóxwe relates how warriors of the earlier period employed such a stone to heal fatal wounds. If it is not possible to administer it as a tea, the stone is simply rubbed over the body of the wounded person.

Curative Practices and Herbal Remedies

HERBAL REMEDIES recorded here may be divided arbitrarily into two groups—the simple and the compound. In the former group, one, two, or three different plant parts are mixed together, as contrasted with those remedies of the second group, which includes from seven to twenty vegetal substances, according to the specific sickness encountered. My informant stated that “man needs medicine made from many different plants to act upon his bodily organs, afflicted by the ills from which he suffers.” Frequently Wi-tapanóxwe uses as many as fourteen different plant substances in making up certain medicines, while other herbalists are said to compound theirs from seven or more elements.¹ Thus we may cite the predominant occurrence of compound remedies among the Delaware in contrast to the simple remedies of the eastern and northeastern Algonkians (Speck 1917).

The bark preparations noted immediately below are called “single” (simple) remedies by my informant and are employed as a cathartic. In preparing and administering these medicines, the correct procedure should be carefully followed in each case. To avoid nausea, bark is customarily removed from smaller twigs and branches rather than from those of larger size. In the preparation of 1 b, c, d, and e, the branches are not roasted as in 1 a.

1. (a) BLACK WALNUT (*Juglans nigra*), “round nut tree”: Three slender branches are roasted in the open fire. The bark from each is then removed by peeling from the tip end² and tied in separate bundles. A strong tea is made by boiling these three bundles of bark together, and large draughts are taken occasionally. To remove bile from the intestines, the treatment is continued for two days. The leaves are scattered about the house to dispel fleas, while the sap is a good application for any inflammation. Juice

¹The native use of twelve different medicines which cause one to vomit and “thus remove his sins” is mentioned by Zeisberger (1910: 134). Elsewhere (p. 55) he states that occasionally the Indians are able to effect a cure with only two or three kinds of roots. If a simple remedy does not bring relief, twenty or more are used.

²To cause vomiting, the bark is peeled upward on the branch.

from the green hull of the fruit is rubbed over the infected area to cure ringworm, "contagious skin disease."

(b) MULBERRY (*Morus nigra*), "surrounding berries tree."

(c) YELLOW BIRCH (*Betula lutea*), "yellow willow."

(d) WHITE ASH (*Fraxinus americana*), "brittle tree."

(e) BUCKTHORN (*Rhamnus caroliniana*), "buckthorn."

2. HONEY LOCUST (*Gleditsia triacanthos*), "accidentally thorned": The bark of the following species, honey locust, prickly ash, wild cherry, and sassafras are combined for a general tonic. This medicine is used for a severe cough and to purify the blood.
3. SYCAMORE (*Platanus occidentalis*), "shedding bark": The bark of the sycamore and honey locust are steeped for a gargle to relieve hoarseness and sore throat. Three chips taken from the east side of the honey locust and sycamore trees are steeped together with red oak bark and sweet flag root to make a hot drink for colds.
4. CHESTNUT (*Aesculus glabra*), "big acorn tree": Nuts are ground up and mixed with sweet oil or mutton tallow to make poultice for earache. A nut carried in the pocket will relieve rheumatism. Nuts are ground up for use as fish poison in streams. This is known as "fish peyote," as it makes them "dizzy" and they can be caught easily.
5. SASSAFRAS (*Sassafras albidum*): Bark of the root, together with other bark, is used as a blood purifier. In spring this is employed as a beverage.
6. WHITE OAK (*Quercus alba*), "gray tree": Bark is a valuable substance in Delaware medicine and is used in compounding many remedies. For a severe cough, a tea is steeped from the bark. For sore throat a stronger liquid is used as a gargle. It also makes an excellent douche; the liquid is used to cleanse bruises and ulcers.
7. PIN OAK (*Q. palustris*), "black acorn tree": An infusion of inner bark is given for intestinal pains. The acorns are edible.
8. RED OAK (*Q. rubra*), "red oak": Bark is steeped to make a tea for severe cough. It will also relieve hoarseness.
9. BLACK OAK (*Q. velutina*), "bitter tree": Inner bark is used for colds and hoarseness. It is infused for tea and gargle.
10. REDBUD (*Cercis canadensis*), "red bud": Bark is steeped in cold water for a drink to reduce fever and stop vomiting.

11. COTTONWOOD (*Populus deltoides*), "tree with moving leaves": Bark from the black haw, wild plum, and cottonwood are combined to make tea for weakness and debility in women.
12. BLACK HAW (*Viburnum prunifolium*), "berries-in-sight tree": Bark taken from the root is combined with leaves of bloodroot, wild plum, pearly everlasting, "stone root," and bayberry to make a tonic to strengthen the female generative organs.
13. ELM (*Ulmus americana*): Inner bark is steeped and liquid drunk for colds and severe coughs.
14. DOGWOOD (*Cornus florida*): The root is combined with others to make a tonic. In another variety (*C. canadensis*), "arrow wood," the bark is combined with that of other species to relieve body pains.
15. PEACH (*Prunus Persica*) leaves are infused to expel pin worms and to stop vomiting in children. A small quantity is sweetened and is drunk occasionally until relief is felt.
16. HOLLY (*Ilex opaca*) is designated as the "red berry tree." It is believed that holly grows up near the place where a person was frightened. If one becomes suddenly frightened, he remarks, "I guess holly will grow here because I was scared so badly."
17. GRAPE (*Vitis rupestris*): Vine is combined with bloodroot, pearly everlasting, "star root" (*Sp.?*), false spikenard, peppermint, and sarsaparilla to make a tonic for frail women. It is also said to increase fertility.
18. FOX GRAPE (*V. vulpina*), "sour berry tree": Sap of the vine is valuable in treating leucorrhea and when removed in spring is beneficial for the hair.
19. ELDER (*Sambucus canadensis*), "hollow tree": The leaves and stems act as a blood purifier and are also used in the treatment of jaundice. From the elder flower, a tea is made for colic in infants. The bark scrapings are used in making a poultice for sores, swellings, and wounds.
20. HOPS (*Humulus Lupulus*): The blossoms are employed in medicine for nervousness. A small bag filled with hops and heated is useful as an application to relieve earache or toothache. A tea made from the plant acts as a tonic-stimulant.

21. DWARF SUMAC (*Rhus copallina*), "kinnikinnick tree": Roots are pounded and applied as poultice for sores and skin eruptions. An infusion of the leaves is used to cleanse and purify skin eruptions. To treat venereal disease an infusion of the roots is taken. The berries are useful in making a mouth wash.
22. WILD CHERRY (*Prunus serotina*), "excrement tree": Bark is used as a remedy for diarrhea and is also combined with other roots and bark as a tonic. The fruit is sometimes used to make cough syrup.
23. GINSENG (*Panax quinquefolius*) is named "man and woman," a term descriptive of the human-like form of the root. The terms "Grandmother" and "Grandfather" are also given the plants, because they are usually found growing in pairs. The root is regarded as being very potent by the Delaware and may be used in treating either sex. In treating males, the "male root" is used and vice versa. Plant is believed to have retreated, like others, before the advance of civilization and hence is rarely found. It possesses medicinal properties which will, in many cases, effect cures where all others have failed. The root is diced in small particles, a tablespoon of which is added to a cup of hot water to make tea. The root is used with other plant parts as a general tonic.
24. "FROST" or "ICE" WEED (*Helianthemum canadense*), was revealed to a Delaware in a dream in which the plant said, "I am strong and great, stronger than any other plant because I remain green later in fall. Use me and you will become strong." Root is used in making poultice for sore throat. Tea infused from plant is taken at same time.
25. POKE (*Phytolacca decandra*), "purple berry": The root of this plant is combined with the bark of sarsaparilla and mountain grape to make a remedy for rheumatism. It acts as a stimulant and blood purifier. In preparing the medicine, the root of the poke is first thoroughly roasted and then crushed. To avoid nausea, a small dose is customary. A salve effective for chronic sores and glandular swellings is made from the roots of the poke (roasted), bittersweet, yellow parilla, and the bark of elder. These ingredients are placed in boiling tallow or lard, to which is added a medium-sized piece of beeswax. A more modern formula calls for the addition of one-fourth ounce of carbolic acid and two ounces of menthol crystals.

26. POISON IVY (*Rhus Toxicodendron*), "irritating" or "blistering" vine: It is not poisonous to everyone. The root contains valuable medicinal properties. A poultice is made from the roasted, crushed root.
27. ANGELICA (*Angelica atropurpurea*), "to mix with smoking (tobacco)": Root is used for stomach disorders, seeds sometimes are mixed with smoking tobacco.
28. ANISE (*Pimpinella Anisum*): Root is used as a cathartic and stomach tonic.
29. YELLOW JASMINE (*Gelsemium sempervirens*), "yellow root": Root is used as blood purifier.
30. The root of STAGHORN SUMAC (*Rhus typhina*), "Cherokee sumac," is combined with that of "horse-hobble weed" or purple cone-flower (*Brauneria purpurea*) as a remedy for venereal disease. The patient should refrain from eating sour fruit and greasy foods. Water should be taken freely and often.
31. BONESET (*Eupatorium perfoliatum*): The root and occasionally the leaves are infused as a treatment for chills and fever.
32. GOLDENROD (*Solidago juncea*): The green leaves are chewed or infused to cure diarrhea. Also used to reduce fever.
33. WINTERGREEN (*Gaultheria procumbens*): Entire plant is compounded with poke root, mullein leaves, wild cherry bark, and black cohosh bark (*Sp.?*) to make a tonic. It is beneficial also for rheumatism.
34. BLACKBERRY (*Rubus nigrobaccus*): The vine is combined with wild cherry bark to cure dysentery.
35. DOCK (*Rumex obtusifolius* and *R. crispus*), "curly leaf": Root is used as a blood purifier and remedy for jaundice.
36. BLACK SNAKEROOT (*Cimicifuga racemosa*), stone root (*Collinsonia?*), and root of elecampane (*Inula Helenium*) are compounded to make a tonic.
37. GOLDEN ASTER (*Chrysopsis mariana*): Tea is made from the root to quiet infants; it acts also as a tonic for sickly children.
38. "TURKEY FOOT" (*Sp.?*), "leaves like turkey foot": Plant tip and root are infused as a tea for weak women.

39. PRAIRIE MOSS (*Sp.?*): Leaves used as poultice for sore throat. Plant is infused as tea, called "tonsillitis medicine."
40. CARDINAL FLOWER (*Lobelia Cardinalis*): An important plant for the Delaware herbalist. Tea made from the root is used for typhoid. Administered in small quantities because of its strength.
41. SAGE WILLOW or "RED ROOT" (*Salix tristis*): This contains valuable medicinal properties of importance to Delaware herbalists.



Painting by Georgetta Brickner

Cardinal Flower

Lobelia Cardinalis

Tea is made from root for women suffering displacement of womb. The plant is used, together with roots of prairie willow (*Salix humilis*), little burr (*Dentaria diphylla*), and false Solomon's seal, to make a tea to treat scrofula and venereal disease.

42. RATTLE-BOX (*Crotalaria sagittalis*), "blown-over weed": A medicine for venereal disease is made from the root. It is a very strong narcotic.

43. HEDGE NETTLE (*Stachys palustris*), "smart weed," is combined with common nightshade, "pretty flower," and button snakeroot to make a medicine for venereal disease.
44. PURPLE CONE-FLOWER (*Brauneria purpurea*), "white flower": This is called "Yuchi gonorrhea medicine" by my informant. A tea made from this root alone will cure an advanced case of venereal disease in seven days.
45. RAGWEED (*Ambrosia artemisiifolia*): Plant used in making a poultice to apply as a preventive for blood poison.
46. BUTTON SNAKEROOT (*Eryngium aquaticum*), "to vomit." This is used as a medicine for intestinal tape and "pin" worms.
47. HORSEMINT (*Monarda punctata*): A tea is made of the plant for fever and to bathe face of patient.
48. BAYBERRY (*Myrica* [*sp.*]): The bark is used as a blood purifier and for kidney trouble.
49. SWEET FERN (*Myrica asplenifolia*): Plant is steeped and liquid applied to blisters, and is combined with mallow root, elder flowers, and dwarf elder to treat inflammation of the bladder. It is also good for scrofula, is a blood purifier, and is useful in removing mucus from the lungs.
50. PIPSISSEWA (*Chimaphila umbellata*): The plant is steeped and the liquid is applied to blisters. It is also combined with mallow root (?), elder flowers and dwarf elder bark in medicine for inflammation of the bladder, and for scrofula. It purifies the blood and tends to aid in removing mucus from the lungs.
51. FALSE PENNYROYAL (*Hedeoma pulegioides*): A tea is made from the leaves to relieve stomach pains.
52. WILD CARROT (*Daucus Carota*): Blossoms picked at full bloom are steeped as tea for diabetics.
53. YARROW (*Achillea Millefolium*): A tea is made from the plant for disorders of the liver and kidneys.
54. PRICKLY ASH (*Xanthoxylum americanum*), "bush with briars" or "little thorn bush". Inner bark is steeped as medicine for heart trouble. A small quantity is taken each day for three days, and after three days the treatment is continued.

55. WINTERGREEN (*Gaultheria procumbens*): A tea made from entire plant is taken for kidney disorders.
56. CATTAIL (*Typha latifolia*): Medicine is made from the root to dissolve kidney stone.
57. PARTRIDGE BERRY (*Mitchella repens*): A tea is made for suppressed menstruation. This remedy strengthens the female generative organs. In the treatment of rheumatism, the "herbal steam" treatment is considered of great value. A strong infusion is made from the roots or twigs of one of the medicinal plants useful for this type of sickness. The patient is seated with his feet in a basin of the liquid, made very hot, and a blanket is then wrapped around the lower part of his body. Cold damp cloths are applied to the head during the steam treatment which lasts an hour or less. The upper portion of the body may also be steamed by raising the level of the blanket. This treatment is effective in reducing muscular swellings and stiff, aching joints. The following vegetal materials are used singly in this way:
58. (a) BULL THISTLE (*Cirsium lanceolatum*), "pretty flower."
(b) POKE.
(c) "FROST WEED."
(d) "Expert remedy," unidentified.
(e) CEDAR (*Juniperus virginiana*),³ particularly the twigs.
(f) HEMLOCK (*Tsuga canadensis*).
(g) DWARF SUMAC.
(h) HOP VINE.
59. BLUE FLAG (*Iris versicolor*), "blue flower" or "top like calamus": Medicine made from the root is valuable for rheumatism, scrofula, and disorders of the liver and kidneys. Combined with the root of sevenbark (*Hydrangea arborescens*), it is used for gallstones.
60. GREAT MULLEIN (*Verbascum Thapsus*), "gray leaf": The leaves are heated and applied to the joints and body to allay rheumatism pain and reduce swelling. These leaves are combined with colts-foot (*Petasites palmatus*), plum root, and glycerine to make a healing syrup for catarrh, coughs, and lung trouble. In preparing this remedy, the mullein must be gathered before the plant blooms.
61. BURDOCK (*Arctium minus*), "big-leaved burr": A tea made from

³ Speck 1931: 47, 127, 151, 171.

the root is good for rheumatism. It acts as a stimulant and blood purifier.

62. BUTTERFLY WEED (*Asclepias tuberosa*), "where butterflies light": Root used as a remedy for pleurisy and rheumatism. It is also administered to women following childbirth. Rattlesnake plantain (*Epipactis pubescens*) has the same term and is used in the same way.
63. ELECAMPANE (*Inula Helenium*), "leaves like Indian cabbage": Root is used in making a tonic and is useful for strengthening digestive organs and removing mucus from the intestines.
64. TOOTHWORT (*Dentaria diphylla*), "little burr": Root combined with other as a stomach remedy.
65. FALSE INDIGO (*Baptisia tinctoria*): Liquid infused from root used in cleaning cuts and ulcers. It is also employed as a douche.
66. JIMSON WEED (*Datura Stramonium*): The leaves are crushed and applied to fresh wounds as a poultice. A salve for treating piles is made by pounding the seeds and mixing them with tallow.
67. COMMON PLANTAIN (*Plantago major*), "path weed": Leaves are crushed and used as a poultice. Plant combined with other plant parts is useful in treating female diseases.
68. CLIMBING BITTERSWEET (*Celastrus scandens*), "yellow root": Root prepared as a poultice or salve for skin eruptions. Tea made from the root will clear up liver spots.
69. SKUNK CABBAGE (*Symplocarpus foetidus*): A tea made from the root is useful in treating whooping cough. The leaves are crushed and used as a poultice to allay pain. People suffering from epilepsy often roll up a small portion of the leaf and chew it.
70. SWEET FLAG (*Acorus Calamus*), "bitter": Root used in making tea useful for coughs, colds, and suppressed menses. Combined with sassafras root for intestinal pains.
71. HEAL-ALL (*Prunella vulgaris*): The plant top is used to make a cooling drink and body wash for fever.
72. SKULL-CAP (*Scutellaria galericulata*): The plant top is a stomach stimulant and a laxative.
73. CATNIP (*Nepeta cataria*), "smells good": The leaves are prepared with peach seed to make a syrup, very beneficial to children.

74. MOTHERWORT (*Leonurus Cardiac*): A tea is made from the leaves which is effective for female diseases.
75. FALSE SOLOMON'S SEAL (*Smilacina stellata*): The root is combined with others as a medicine to cleanse the system and stimulate the stomach. It is a remedy also for leucorrhea.
76. MAY APPLE (*Podophyllum peltatum*), "flower hangs down": A spring tonic and a laxative are made from the root.



Painting by Georgetta Brickner

Bittersweet

Solanum Dulcamara

77. BLOODROOT (*Sanguinaria canadensis*): For general debility, a pea-sized piece of root is taken every morning for thirty days. Bloodroot is combined with other roots for a stomach remedy. The plant root provides the face paint used in the Big House Ceremony of the Delaware.

78. DANDELION (*Taraxacum officinale*): A laxative- tonic is obtained from the plant.
79. VIRGINIA SNAKEROOT (*Aristolochia Serpentaria*): This is used singly or combined with wintergreen as a tonic.
80. FRINGED GENTIAN (*Gentiana crinita*): A tea made from the root acts as a blood purifier and stomach strengthener.
81. BLACK SNAKEROOT (*Cimicifuga racemosa*), elecampane and stone root are combined to make a tonic.
82. MILKWEED (*Asclepias* [sp.]). A tea made from the pounded and steeped roots of the five species of milkweed is a cure for epileptic fits in those born during certain phases of the moon. Such disturbances periodically occur during a particular moon-phase period.
83. PEYOTE (*Lophophora williamsii*), "Our Father," is known to have been used to treat periodic fits and is regarded as a sure cure for tuberculosis.⁴ Wi-tapanóxwe carries a small, fringed leather bag, tied with deerskin thongs, containing several peyote "beans" or buttons for use in case of emergency. Certain Delaware subscribing to the "Wilson cult" wear a small beaded bag containing peyote around their necks as a protection against illness. This talisman is even regarded as an advisory agent of approaching domestic and tribal crises. Wi-tapanóxwe is not convinced of the truth of this statement, but claims that he merely carries his own supply for medicinal purposes.⁵
84. CACTUS (*Opuntia vulgaris*) is called "thorny, useless." Wi-tapanóxwe remarked that the Oklahoma negroes singe off the spines and apply a sliced portion to their corns to allay pain.

MISCELLANEOUS BELIEFS

1. To draw out frost bites, walk in the snow barefooted. Rubbing snow on the ears will bring relief.

⁴ It is said that this highly valued and potent medicine was revealed to a woman in a dream who gave the knowledge of it to her people. It may be eaten with or without the usual ceremonial rites. For a study of the Peyote rites among the Delaware at Dewey and Anadarko, Oklahoma, see Petrullo 1934. For more details, consult Safford 1916: 387, 424; Harrington 1921: 185-190; and the more recent study of LaBarre 1938.

⁵ This practice corresponds to one general among eastern Algonkian peoples—that of carrying a piece of "muskrat root" (*Acorus calamus*) about the person as a disease preventive. A piece of the root is chewed in case of sudden illness.

2. Frost or dew gathered in late fall and rubbed on the body will prevent skin eruptions.
3. Water that collects in hollow trees or rocks is believed to have medicinal value.
4. Mud applied to a burn will take out the "fire."
5. To cure a child from slobbering, catch a number of minnows and have the child hold them in his mouth. Repeat this several times a week until the cure is effected.
6. To cure a child of bed-wetting, feed him portions of a roasted "timber rat."⁶ This is believed to effect a sure cure. My informant and a companion once killed and roasted such a rodent, and both agreed that the flesh was palatable and not unlike that of squirrel. They were reticent, however, as to the therapeutic effects.
7. Relief is obtained in the case of whooping cough if the mother first suckles a puppy and then her child.
8. A spider web applied to a flesh wound will stop the flow of blood.
9. Excrement of cattle or of poultry is employed as a poultice for boils.
10. Skunk-oil is regarded as a valuable remedy for colds and croup. For children the average dose is from three to five drops. A small quantity may be used externally on the throat and chest. Oil obtained from geese is employed similarly for colds. Skunk scent or rabbit urine is put into the ear to relieve earache. Deer and otter scent are also useful for medicinal purposes.
11. A syrup made by roasting onions is taken for colds. For infants and small children the syrup is sweetened and a few drops taken clear or in milk.
12. Mutton tallow is an emollient for chapped and irritated skin. It is used to make ointment.
13. Muscular cramps may be relieved by bathing the affected parts with urine.
14. A tea made from roasted, charred pig hoofs is beneficial for colds.
15. For snake bite suck the venom from the wound with a hollow piece of deer antler.

⁶ Compare use of a white-footed mouse for the same purpose among the Gay Head Indians (Tantaquidgeon 1930: 20).

16. Treatment of sick horses. Years ago, after their migration westward, the Delaware used horses for travel. Often their animals would become ill during hunting activities on the western plains. This was believed due to unsuitable drinking water or to eating poisonous weeds. Other disabilities were due to "bots"⁷ or colic. For colic, strong tobacco juice or gunpowder dissolved in hot water was administered. The most effective treatment was to throw a bucket of very hot water containing finely chopped bits of weasel hide⁸ over the horse. Then the owner would force his weight up and down on the animal's abdomen, or occasionally beat it with a wet, heavy blanket for ten or fifteen minutes. The horse soon recovered and was again on his feet.

WARRIOR'S MEDICINE

Warriors long ago also received gifts from supernatural agencies which enabled them to excel in feats of bravery. Their power came in dream visions in which the identity of the supernatural was made known. Sometimes a power-song was granted at the same time. Certain men were appointed as leaders of the warriors and custodians of the secret formulae, from which a particular preparation called "warrior medicine"⁹ was prepared. Such formulae were transferred from the warriors of one generation to another, in native theory only those known to live clean, pure lives being the recipients. A warrior carried a bundle which contained medicine and personal charms. The medicine stone¹⁰ was used only in times of crisis.

⁷ The larvae of certain flies. Eggs are laid on the inside of the animal's foreleg, gain entrance into the blood stream, and are carried to the alimentary tract where incubation takes place.

⁸ The hide of the so-called "spotted weasel" is used for this purpose. My informant had never seen this animal, but it had been described to him by his mother. It may refer to the ordinary weasel at the period of seasonal pilage change from brown to white. The species known to the Delaware are the Bonaparte (*Mustela cicognani*), and New York weasel (*M. noveboracensis*) (Anthony 1928: 102).

⁹ According to Zeisberger (1910: 127), "Warriors, and especially Captains, procure a beson [medicine] thought to be capable of preserving them from arrow and ball." Converse (1910: 168) notes the use of medicine made from the roots of corn, which the men drank. It afforded them such supernatural protection that "they could not be shot even though they were shot at seven times."

¹⁰ See pp. 26 and 27.

USE OF WAMPUM IN HEALING

Shell wampum is used in treating cases of paralysis or similar afflictions believed due to failure of parents to fulfill certain ceremonial obligations or to breaking certain taboos. Before receiving treatment the patient presents one yard of wampum¹¹ to the medicine man. Potency is added to the herbal medicines by the wampum and enables the doctor to diagnose the case in a brief time.¹²

THE OTTER MEDICINE

The Otter¹³ was regarded as the most sacred of all water animals. It figured in a ceremony described by Harrington¹⁴ in which the spirit of the Otter was propitiated. In order to capture the animal a special lure was made. The formula for preparing such medicine¹⁵ was in the custody of an old man of sufficient spiritual purity to withstand its great power. Certain roots,¹⁶ cleaned by the old man in running water to the accompaniment of a song, were used. In doing so he was obliged to walk against the current, throwing water upon his tracks to conceal them. A secluded place was sought out for this preparatory rite. The medicine was hidden away from his dwelling lest it lose potency through the proximity of a woman. The medicine was considered very effective in luring other water animals, since it was a gift from the Otter, the most powerful of such creatures.

THE DOG AS A VICAR OF CHILDREN

Upon the birth of a Delaware child, it was given a pet¹⁷ to serve as the guardian of its health. If there was sickness about, the Delaware believed that it would be visited upon the dog instead of its little master. The animal was thought to say, "I am only a dog, the child is more precious." A small bag containing charcoal was tied around the pet animal's neck by the child's parents. Frequently they would talk to the dog. If the animal died it was buried and the child given another

¹¹ Measured from the shoulder to the wrist.

¹² The function of wampum in healing and in the ceremony of the Big House is discussed by Speck (1931: 52-53).

¹³ *Lutra canadensis*.

¹⁴ 1921: 176.

¹⁵ Known as "otter medicine."

¹⁶ The same plant, "pull up" (*Sp. ?*) is also used in preparation of love charms (see pp. 15 and 16).

¹⁷ Known by a term meaning "pet given child."

pet. However, if the child fell sick and died, a release ceremony was performed¹⁸ by placing a string of wampum about its neck, thus freeing the animal.¹⁹

NOTES ON PREGNANCY AND CHILDBIRTH

The prospective mother is advised to eat sparingly. Sour foods should not be eaten during the final stage of pregnancy as they are believed to cause contraction of the muscles. Onions and cabbage are also excluded from the diet. Salt is forbidden both before and after pregnancy, as it is thought to stop the flow of blood. Lifting heavy objects should be avoided during pregnancy and for a period of a month after delivery. A pregnant woman should not gaze at a deformed person or make fun of him, as it might affect her child. Care is also taken to avoid being frightened by dogs and other animals.

The woman is usually attended by a midwife who is given gifts of calico, tobacco, etc., from the woman's husband. To women over thirty years of age, a special medicine is given to shorten the period of labor.²⁰ The delivery is made in a kneeling position. Immediately after, a tea made from "pleurisy root" is administered. The navel cord is cut off about one and a half inches from the body. A piece of lead about two inches in diameter is bound to the body over the navel by a cloth. This bandage is kept in place until healing is complete, to avoid protrusion of the navel.

In case of stillbirth, special treatment is given the mother. Stillbirth is believed due to the child being hurt. "The child-killing sickness of women is hard to overcome." Twins are believed to have been connected within the womb. If one is hurt, the other will feel it even though they are separated by many miles. A child whose mother died during its birth must not be allowed to cry. Someone must try to comfort it so that the spirit of the dead mother may not injure, or even kill the foster parent.

Birthmarks are an indication that both parents have experienced difficulties with other people. During his youth one man conversed with a dead person in a vision. The skeleton said to him, "You should know me by the mark on your children. You will know more when they are born." All of his children (boys) had a characteristic pe-

¹⁸ See also p. 113 for release of a bear.

¹⁹ As dictated by Wi-tapanóxwe.

²⁰ ". . . the women know of a number of remedies," according to Zeisberger (1910: 56), "which usually act quickly and well, as in the case of hard labor, which sometimes occurs, though not frequently . . ."

culiarity about the eyes, lacking control of the lids so that during the day they blinked constantly. Sometimes a birthmark in the shape of a leaf or berry appears on the child. This is attributed to a dream by the mother. The fruit means good luck and long life. A mark formed like a reptile is considered a good omen.

While nursing the child, the mother must refrain from intercourse with any man other than her husband so that the infant may not have diarrhea.

A few notes were obtained on the treatment of the hair and teeth of children.

When a child's hair is cut, it is left in some out-of-the-way place.²¹ It was believed that if the birds used it in building their nests, the child would suffer from headaches. If the remains were burnt, it would cause the hair to become brittle.²²

During the teething period, a little bag containing finely crushed charcoal is hung about the child's neck. The later chews upon it to ease his aching gums. A loose milk tooth is pulled out by means of a string, its removal allowing the permanent tooth to grow in straight. The extracted tooth is taken outdoors by the child and thrown in the direction of the east, with the words "My tooth I place down here. I know when you return I will feed you white beans."

A child's nails are trimmed with a knife or scissors. Care is taken not to lose any of the nail trimmings, which are carried into the woods and left upon a stump. At the same time the following words are addressed to the Owl: "Grandpa, I now give you these, your grandchild's nails, to make frames for your eyes."

²¹ This and the following paragraph were recorded by Eugene Golomshtok, University of Pennsylvania, 1930.

²² In adult life gray hair, an indication of longevity, is not pulled out. Its removal would be displeasing to the Creator as a lack of respect for the aged.

Witchcraft

A TRADITION still existing among the Delaware tells of the development of witchcraft among the Nanticoke¹ and its introduction among the former prior to the period of their westward migration. The Nanticoke are said to have possessed a very powerful medicine which certain of them decided to use for malevolent purposes. Thereafter they went among the Delaware causing sickness which in most cases proved fatal. The Delaware people declined in numbers, but although greatly alarmed, were unable to destroy the guilty ones. Finally one night a man saw two large owls in a tree. He shot them. Upon reaching the spot where they had fallen, the bodies of two strange men were found.² It was decided that these were responsible for the black magic. Later two women arrived, searching for their husbands. When told the story of the owls and their fate, the women declared these to have been their husbands who had transformed themselves in order to work evil. This, according to the Delaware, marked the introduction of witchcraft into the tribe.

The present-day Delaware consider witchcraft to be an evil practice and the lowest form of shamanistic activity. There are, however, occasions when such power may be, as my informant phrased it, "legitimately used." If necessary to preserve one's life, its use is not considered evil. This power was of such great force and potency that only the greatest shaman could break the spell inflicted by a witch. It is believed that the last of the witches died many years ago, their evil medicine buried with them.

Those men and women known to be adept in black magic usually received their malevolent power in dreams. Certain of them, however, acquired it of witches who before death transferred their power to others. Such witches who carried on their evil practices at night were called "night travelers." As a rule they did not mingle with other people during the day lest they betray their evil power in some way,

¹A statement by Zeisberger (1910: 126) runs: "By the Nantikoks the Indians have been instructed in the use of a peculiar kind of poison called *Mattapassigan*, meaning poison." This is probably the term translated here as "medicine for gaining influence," or "witchcraft." See Speck 1937a: 135-142.

²This incident is contrary to a current belief among the Delaware and Nanticoke that a transformed person, if wounded, does not die until he reaches his destination and resumes his natural form.

and thereby be accused. Their chief activity seems to have been that of annoying people, especially the sick, and of seeking revenge upon their rivals and enemies through use of their powerful medicine. But little is known of the actual nature or content of such medicine since it was always handled with the greatest secrecy. It is said, however, that such magic potions were concealed in small clay vessels, from which a small portion was removed. This was placed in the miniature pouch containing the supernatural token, by which the witch effected his transformation at will. A feather, claw, tooth, hair, or other part of a bird or animal capable of exerting evil influence, formed the medium of transformation. The small skin bag, "witch pouch," was carried suspended from a cord passing over one shoulder and across the body. It is said that a witch was unclothed as he traveled through the air, all the necessary equipment being carried in the pouch.

The clay medicine vessel was left in his dwelling by the witch. When one of the latter was taken and killed, his bowl was always sought and buried with him. Only by such an action could his power be completely destroyed. It was believed that if a witch lit his pipe before setting out upon his nefarious pursuits, he must return before the tobacco had completely burned out. He dared not stay longer lest he be discovered. A witch killed by a person lacking supernatural power would not die until his return home; if slain by a shaman, however, he succumbed immediately and was transformed into his human form. In former days a chief was free to order a witch put to death. The victim was dispatched by a blow from a war club and buried, together with his evil medicine.

My informant differentiated between a witch and a conjurer, indicating that the later used his power for both good and evil, whereas all the activities of the witch were for malefic purposes. He related the following incidents which involved witchcraft:

My mother told of the time she was bewitched. When a young girl, an older man wished to marry her. He asked her parents, but my mother refused his proposal. This made him very angry. Soon she became ill and as the cause was not known, a sweat doctor was called. Upon being given some tobacco, he set out to learn the cause of the illness. After a few visits, the doctor said that she was bewitched. Her parents could recall no one who might be responsible except the rejected suitor. After some time, a small bone came from one of her fingers. It had been sent into her body by the witch. The sweat doctor had cured her.

The same witch wished to marry another girl. She was very young and considered the most beautiful girl on the reservation. As my mother had done, she refused the suitor, saying, "Why, I wouldn't marry that old man, besides, I'm too young to marry." When told of her answer, the old man said, "From this time on, if she ever sees her beauty again, it will be a surprise to me." So he set to work on her. In a few days she began to have trouble with her eyes. One night she awakened to see a human form standing over her. She felt peculiarly helpless and couldn't move. The strange person moved his hands across her eyes and disappeared. In a few days her eyes began to get sore and continued to grow worse until at last her sight was completely gone.

Later it was discovered that this blind woman had become a witch. She was married and had one daughter. The husband was of the Seneca tribe. Once she told her cousin, "I am getting old and there is something I wish to show you. Come to my house soon." The cousin became suspicious and delayed the visit as long as possible. Finally she went. The old woman showed her a trunk containing certain personal possessions, of which she was to take charge after her death. In removing them a snake skin was brought out and fell over the side of the trunk. While the visitor looked, the skin moved and as they talked, it wriggled back into the trunk. It seemed very unusual for the old blind woman to have such a snake skin. Finally she said to her visitor, "Now, I am going to die and I don't want this medicine to go out of the tribe. My daughter is old enough to take charge of it and I can't give it to my husband since he comes of a different tribe." The old woman died without anyone knowing what became of her medicine. Her cousin never admitted accepting it, but after her death it was found and buried with her. And that was the end of the witch medicine.

Those who were aware that a certain person was a witch rarely dared expose him lest they or some member of their family would become bewitched. This is clearly brought out in the following incident:

Once a Cherokee woman lived with the Delaware. She was very large and powerful, and was known as "Large-waist Cherokee Woman." Living with her was an adopted Delaware woman called "Day-light Person." Both women were old. Once the Cherokee took sick. Her friend believed that she went away at night, but never succeeded in confirming it. Finally the Cherokee informed her that she had been wounded. There was a bullet hole in her abdomen, in which she had stuffed grass to stop the flow of blood. The grass, however, had caused inflammation, so that she suffered

greatly. At last she told her friend that she wished to confess. She said, "Now I am going to die and I want to tell you something. You must never reveal it or you will die also. I was out travelling one night and someone shot me." After her death, the other woman one day revealed the secret to some friends and soon after died.

One of the last of the Delaware witches is said to have joined the church, but continued to practice witchcraft. She believed that she could not find salvation because she had sold her soul to the Devil, but by joining the church, thought she could secure some peace of mind.

The unnatural behaviour of birds or animals, as observed in dreams or waking life, has led people to regard them as transformed witches. Once a man saw a hog which, as he looked at it, seemed to grow longer and longer. He started towards the animal, but it retreated into the bushes. Thereupon he knew it was a transformed person.

A second incident involved a young man returning home from a dance early in the morning. The path led through the woods and over a hill, at the foot of which stood a small cabin occupied by two old women. As he rode along, an owl flew quite low over his head towards the cabin, where it disappeared. The young man told his people of the unusual flight of the owl, and everyone agreed that it was one of the old women returning home. Both had previously been suspected of witchcraft.

Another person had a similar experience with a boar. The man lived alone and one night, while lying on his bed, the door opened and in walked a large boar. The Indian, quite surprised by this, picked up a poker from the fireplace and attempted to drive out the animal. The boar ran around the table several times, without the man succeeding in striking it. Finally it escaped through the door. The man hurried outside and looked around, but the animal had disappeared entirely.

Many years ago a man about forty years old married a woman who was over seventy. My grandfather's brother lived with this couple. He was a powerful medicine man. After some years the old woman took sick and died. Her husband, a very vain, boastful individual, did not conceal his pleasure over her death. He was heard to say, "Now, I am the boss. See what I will do." My grandfather³ soon after left the house. He walked away down the hill, frequently look-

³In the Delaware kinship terminology one's grandfather's brothers are called by the same term as the grandfather.

ing back at the house. After a while he returned. He had left to prepare a magical snare by which to entrap the boastful widower. He set the snare at the doorstep of the house and went in and sat down. However, a visitor was heard approaching, and my grandfather quickly removed the snare so that an innocent person would not be harmed. Afterwards the invisible snare was reset and the intended victim stepped over it. Immediately after he suffered a congestive chill and by night he was dead. His wife's corpse was still unburied. The day after her funeral, her husband's body was laid away. My grandfather did this to show that supernatural forces did exist to punish inhuman boasting. His people regarded this as an act of conjuring rather than witchcraft.

Persons who possessed the power of bewitchment were obliged to take at least the life of one human every year. During their annual meeting, if any witches had failed to do so, they deliberated upon the choice of a victim at that time. The belief was held by the Delaware that failure to do so would result in misfortune for the witch or his family through sudden illness or accident. Before a witch died, he had to transfer his medicine to another to prevent the uncontrolled evil power from reacting upon a member of his family.

Dreams

ALL DREAMS are regarded as significant by the Delaware. Some indicate good fortune and long life, while others foretell sickness and death. One type of dream of unusual significance is known by a term translated as "to dream ahead." Thus to dream of berries, fruit, or vegetation during the winter season is a sign that the dreamer will live to see the fruits of many seasons. To dream of snow at any time of the year is an indication of long life.

It is believed that the recurrence of the same dream for several nights is a sign of important news or even impending danger. In one such case, mentioned by Wi-tapanóxwe, his deceased parents appeared to him on six consecutive nights to warn him of an event which occurred a number of years later.

Long dreams were particularly significant to the Delaware hunter. Always in search of game animals for food, he was often led by the animal supernaturals in dreams to the secret places of the game. Upon awakening the hunter would offer a prayer and sacrifice a pinch of tobacco in his camp fire. Then he would follow the trail indicated to him in the dream.

It is customary for the Delaware to learn in dreams names suitable for their children. During the later stages of pregnancy, the midwife or an old man is asked to think of a name and that revealed in a dream is later given to the child. Such a person need not necessarily be of the child's immediate relatives. Occasionally a gift is made him for this service.

To dream of catching fish in clear water is an indication that the dreamer will soon receive a sum of money. To dream of muddy water, on the other hand, is a sign of approaching illness or domestic difficulty.

To avert unpleasant dreams, a person smokes and prays to the Creator, appealing to him for aid in propitiating the supernatural powers responsible for such dreams. Cedar is also burned in the house to cleanse it. If a child is troubled by dreams at night, cedar boughs are soaked in water, which is sprinkled over his person and the bed. This is believed to keep evil spirits away.

The more conservative Delaware have always been dependent upon

dreams and the appearance of certain celestial phenomena to warn them of impending danger. The appearance of a comet, "war spirit," in the heavens is a sign of war. The "war dragon" flies through the air at night and appears like a streak of fire. The direction towards which its course is bent is noted as the source of trouble. My informant reminded me of the appearance of such (Halley's comet) before the outbreak of the first World War. A falling star is also significant in wartime. A fugitive attempting to escape may be located by means of a falling star, which the Delaware believe points to the spot of concealment. To point to a falling star will bring bad luck to a person.

Natural Signs and Omens

A FEW BELIEFS of miscellaneous character are noted for other natural phenomena. The two ends of the rainbow are believed to point to water. A snowfall late in the spring, with the wind to the north, indicates that the snow spirit is returning to his abode in the north. In the fall an abundance of berries and nuts, thick foliage, and heavy corn husks points to a long and severe winter.

A ringing or buzzing sound in the ear is a sign of impending death or bad news. The ear in which the sound is heard indicates the direction from which the news may be expected.

The twitching of the left eye, in the case of my informant, is a warning of the death of a relative or friend. This takes place two weeks or two months prior to the individual's death.

To see the suddenly disappearing likeness of a person is also a warning of death.

If a wolf barks at a person, it is an indication that he will live long.

Once Wi-tapanóxwe, upon returning from the home of a sick person, saw a rabbit run from the shelter of a grave towards the house he had just left. To him it was a sign of the sick person's death in the near future.

Babies and small children are not allowed to cry at night nor older children to play after dark for fear that their faces will become misshapen.

A "double crown" in an individual is an indication of longevity and superior intellect. The larger such features are, the longer is the possessor to live and enjoy the blessings bestowed upon him by the Creator. An individual so blessed is assured of spiritual guidance and is likely to excel in his life work.

If chickens continue to scratch for food during a rain, it is an indication that the rain will continue for some time. A cock crowing during a storm says, "Going to clear off today." Crowing before midnight by the bird indicates a change of weather. Crowing on the doorstep brings a visitor.

If smoke from a fire rises during a storm, the rain will soon cease; if it hovers near the ground, the weather will continue unsettled.

If the sun casts slanting rays through the clouds, it is "drawing water." Rain will fall the following day.

When the wind blows the leaves "inside out," it is a sign of approaching rain.

A circle around the moon foretells an approaching storm. The number of stars within the circle indicates the time it will arrive.

To hear the sound of talking or cutting wood over a great distance indicates that a storm is brewing.

A hog carrying sticks of wood in its mouth is a sign of approaching rain.

"Three foggy mornings bring rain."

Thunder heard late in the winter foretells an early spring.

Loud reports from river ice indicate early thaw.

A wolf "whinnying" (howling) denotes a change in the weather.

To see a cat washing its face is an indication of an unexpected visitor; sharpening its claws denotes that it will soon receive some meat.

Delaware Food Resources

IN AN EARLIER section it was pointed out that according to native belief, human health is dependent upon "pure, natural" food. Products of the fields and forests thus acquired a sacred character (Speck 1931: 50); food and medicine in Delaware conception were not totally unlike. It follows from this that the ailments which afflict the Indians in modern times are considered as being due to a departure from the ancient food regimen provided by the Creator. Investigation of the food supply, and its methods of preparation, was thought worthy of being taken up as part of the present phase of inquiry. The results are embodied in the present section, partly through their bearing upon health as dependent upon food. Except for this interrelation, the subject matter might seem to be more definitely an economic one.

MAIZE

Among the food products used by the Delaware, Indian maize (*Zea mays*) stands out as the staple vegetable product. Maize is believed to provide nourishment for the soul as well as for the body. The reverence for the Spirit of Maize¹ and for the processes of its preparation still survives among the Delaware.

Before presenting the data which deal with the preparation of corn foods, it seems appropriate to mention native beliefs concerning the origin of this sacred food.² Maize, "original corn" or "common corn," is a gift from the Creator, and in former times, according to Harrington (1921: 43, 141), was considered as one of the powerful Spirit Beings. Zeisberger (1910: 139) referred to Indian corn as the "wife of the Indian," and, in describing certain ceremonial rites, stated that they offered bear's flesh as a sacrifice to the corn. He also said that corn was offered ceremonially to the deer and bear. Apparently, Harrington (1921: 70, 195) did not learn the details of this Corn Spirit rite, but the plant was, however, mentioned as a guardian

¹ Harrington 1921: 43, 193.

² For further information dealing with the maize complex in eastern North America, particularly among the Iroquois, see Parker 1910; Converse 1910; Waugh 1916. The writer (1930) has noted the survival of certain traits indicating the presence of a religious rite in the early period among the southern New England tribes. For the southeastern peoples, consult Swanton 1928b: 443-444.

spirit, Mother Corn. There is an interesting ceremony recorded by Dr. Speck³ which the Delaware held to propitiate the Spirit of Mother Corn, whom they considered to provide protection over all vegetation. It is related that many years ago the corn crops began to decrease, so that people became alarmed. The leading men of the tribe met and agreed that to avert a famine, a ceremony must be performed to appease the Maize Spirit. It was feared that she had become displeased and intended to abandon her children, the Delaware. In this way the Corn Harvest Rite originated, and the performance of its ritual was made the occasion of a festival.

Corn also figured in the ceremonial diet of the participants of the Big House Ceremony. Dr. Speck (1931: 73) notes that corn flour and hominy were prepared and served by women attendants.⁴ These foods were prepared in wooden mortars kept expressly for ceremonial use.⁵ As was previously stated, corn gruel or hominy is considered to be the proper food for sick or convalescing persons.⁶

Indian corn of the variegated variety is known as "common" or "original corn."⁷ Another variety, called "hollow corn," is ground into flour for use in making bread.

So far as could be ascertained, the use of corn medicine and fish fertilizer in corn hills is the only vestige of the ritualistic complex now associated with maize cultivation.⁸ My informant stated that in former times it was customary to use medicine in which corn was soaked to prevent cut worms. At present, seed corn is soaked in water and hardwood ashes. Fish bones were burned and combined with wood

³ 1937a: 79-90. In addition to the Corn Harvest rite and Corn Famine text, Dr. Speck has an account of the Vegetation Ceremony now performed biannually in the spring and fall. These gatherings are now called "Bread Dances" and in addition to the performance of a ritual, afford an occasion for recreation. Both men and women take part.

⁴ The three men and three women who are responsible for the ceremonial equipment and assist in a ceremonial role in the nightly performances during the period of worship in the Big House (Speck 1931: 71, 75).

⁵ A similar observance has been recorded for the Mohegan of Connecticut and the Indians of Wampanoag extraction at Gay Head, Massachusetts. See Tantaquidgeon 1930: 5-7.

⁶ See diet, p. 17.

⁷ I have observed that my own group at Mohegan, Connecticut, and the people at Gay Head, Massachusetts, regard varicolored corn to be the original variety and value it very highly.

⁸ The Iroquois observed the practice of soaking seed corn in a medicine especially prepared from certain plants. "The 'Armouchiquois' [French term for certain Algonkian tribes of New England] employed both fish and shell to enrich the soil." (Waugh 1916: 17-18)

ashes and put in the corn hills as an offering to the Maize Spirit. Corn, beans, and squash were planted together, but the legend of the Three Sisters (corn, beans, and squash)⁹ so prominent in Iroquois mythology is absent.

The different varieties of maize are not planted near one another because, it is said, "One will visit the other and forget to come back."

When corn matures one must share the first gathering with a less fortunate tribesman or with some old person. This rule applies to all crops as well as to the first kill.¹⁰ In order that people may continue to receive the blessings of the Creator, every man is obligated to share his first fruits and game with others before partaking of them himself. The practice of sharing vegetable food with a neighbor is known by the term, "I feed you." A hunter offering animal flesh in observance of this rule, used the phrase "I give you some meat."

There are several methods employed in preparing corn as food:

- (a) The husk is taken off and the ears laid in the sun until thoroughly dry. The grains may then be removed and pounded into hominy grits.
- (b) After removing the husk, the ears are boiled until thoroughly cooked. Then they are allowed to cool. The grains are removed with a spoon and spread out to dry.
- (c) The ears are laid before the fire and roasted.

Early records indicate that corn parched and crushed to meal served as a very nourishing food, which was indispensable to the hunter or traveler of that period.¹¹ Zeisberger (1910: 22) mentions two varieties of corn meal which the Indians prepared for use on long journeys. Dried, unroasted corn was crushed to a meal or roasted in

⁹ The corn, bean, and squash complex is discussed by Parker 1910: 36, and Converse 1910: 63.

¹⁰ According to Zeisberger (1910: 84), a hunter before setting out upon a long hunting trip, would kill a deer or two and prepare a feast as a sacrifice to the game. The old people as invited guests would pray for his good fortune during the expedition.

¹¹ Williams (1827: 33) mentions "*nokehick*," a parched meal used by the Narragansetts. He says in part, "I have travelled with neere 200 of them at once, neere 100 miles through the woods, every man carrying a *little Basket* of this at his *back*, and sometimes in a hollow *Leather Girdle* about his middle, sufficient for a man for three or four daies." Waugh (1916: 88) says, in writing of Iroquois corn foods, "There was apparently no more popular travelling or hunting food than this preparation in olden times. It was light, nourishing, and could be eaten either cooked or raw." In the Mohegan-Pequot dialect it is known as *yo'keg*, "corn parched and pounded," and among the Wampanoag descendants at Gay Head, it is called *no'cake*. In the two latter groups it is prepared in precisely the same manner as among the Delaware (See Tantaquidgeon 1930: 6-7).

hot ashes and then pulverized. The meal was mixed with sugar, or water, and then eaten. Occasionally it was boiled in water. Heckewelder (1910: 195) says that their *Psindamocan*¹² or *Tassmanane*¹³ is the most nourishing and durable of their corn foods. He adds that they preferred the blue, sweet variety for this meal, and that with but a little of this food, they set out on long journeys.

Among the present-day Delaware the variety of corn used and the methods of its preparation are the same as noted by Zeisberger and Heckewelder. However, due to the scarcity of "squaw" or variegated corn, it is now regarded as a ceremonial food. The corn is thoroughly parched and then pounded in the hominy mortars. The fine meal resulting is hominy or "traveling food." This may be eaten either mixed with water or with milk and sugar. The grits ground medium fine are cooked with meat, the combined food being called "whole face hominy" and used in the Masked Dance Ceremony.¹⁴ The coarse grits are called "hail stones." These are cooked and eaten with milk.

Dry, unparched corn is made into flour or pounded medium fine or coarse. The flour is used in making bread. A soft dough is made and rolled into a flat cake like a biscuit, which is dipped in cold water and put in the ashes to bake. This bread is known as "put-in-the-ashes bread." Bread dough to which is added chili beans or raisins is put in greased vessels and baked in the Dutch oven. Dumplings stuffed with chopped meat are boiled. The coarse hominy is boiled and used in different ways. It may be eaten with milk and brown sugar or with any kind of meat grease. A little salt may be added for additional flavor.

Various kinds of nut meats are added to cooked hominy to make a dish known as "nut hominy." Hominy and chopped meat (beef, pork, or other fresh meat) are cooked together and then allowed to stand until sour. After hickory nuts are added to this mixture, the result is called "soured nut" hominy.

Hulled corn is made by boiling dried corn in a strong liquid, made alkaline by the addition of hard wood ashes. This process of preparation is long and arduous, since after hours of steady boiling it requires many washings in clear, cold water to rinse the lye from the loose hulls. This food may be eaten with milk and sugar, fried with potatoes

¹² I was unable to obtain a translation of this term but my informant recognized it as pertaining to corn meal food.

¹³ "Dried corn product."

¹⁴ See Speck 1937a: 52.

in pork fat, or combined with fresh or dried meat for stew, or with beans for succotash.

WILD VEGETABLE FOODS

Long ago fruits and berries were preserved by drying, this practice giving way in later times to canning and the manufacture of jelly and jam. Dried fruit are prepared to eat in a number of ways. Grapes are boiled, and the resulting liquid thickened by the addition of corn meal, flour, or hominy grits. A boiled pudding is composed of dough made of cornmeal and flour, or flour only, to which any variety of berry, except strawberries, may be added. This dough is then placed in a cloth bag and boiled. When ripe, persimmons are mashed and spread on a cloth to dry for use in a bread called "persimmon bread." With few exceptions all of the fruits and berries mentioned are made into pies, puddings, preserves, fruit butters, and jams.

The various varieties of nuts are gathered in large quantities and stored away for future use. These provide a nourishing supplement to the remainder of natural food stuffs. Nuts are eaten raw, roasted, boiled, and frequently incorporated in other types of food. Edible acorns are usually roasted.

With the introduction and increased use of European food products, the necessity arose among the Delaware of fitting them into their own linguistic configuration, if the foreign terms themselves were not taken over. Like so many primitive groups, the Delaware came to apply native terms of a descriptive nature to the majority of elements foreign to their culture. Many of these have been retained to the present day. Thus, for example, the Delaware term for the cocoanut is "water hickory nut."

"Indian Potato" or Ground Nut (*Apios tuberosa*), "wild potato": The tuberous roots are gathered in large quantities and stored for winter use. They are not considered good after sprouting. The roots are either boiled and eaten as the cultivated potato, or dried and ground into flour used for making bread. In recent times the ground nut has not grown abundantly in the Delaware habitat, and is now considered a rare delicacy.

Sorrel (*Rumex Acetosella*), "sour": This plant, prepared much like rhubarb, is used as a filling for pies.

Onion (*Sp?*): Of the different varieties of wild onions, three are regarded by the Delaware as being edible. The one most commonly gathered for use is the "buttonseed." These are dried and prepared

by frying, or boiling, or are added to flavor stews and soups. Wild onions are also cooked in grease to which eggs are added.

A species of mushroom (*Agaricus campestris*), "tripe form," is fried in hot fat, or salted and boiled.

Certain plants are considered to be healthful foods, especially in spring, when people were in need of the medicinal substances present in them. The practice of seeking the first green plant shoots in early spring is not peculiar to the Delaware alone, but is characteristic of other eastern Algonkian peoples. Such food is called "greens" or "plant tops." The young shoots are usually picked and cooked separately, or mixed with several other plants. In both cases the "greens" are par-boiled in water and then cooked with meat. Among such plants may be mentioned dandelion, milkweed, poke, lamb's-quarters, mustard, dock, and watercress.

ANIMAL FOODS

Wild animals, as pointed out by F. G. Speck (1931: 28-29), are in general considered to exist in clan relationship with humans. The latter are said to be "kings among animals." Clean pure animals of the forests are referred to in terms of human relationship and their spirits must be propitiated before they can be sought for food. If the supernaturals are appeased through sacrifices, the animals will allow themselves to be taken, but if the proper ceremonies are not carried out, they can never be approached by humans. Therefore, a hunter is obliged to pray and to sacrifice tobacco before starting on the hunt, and also if he should dream during the hunt of seeing game. The Delaware "sharing-feast" described by Zeisberger has previously been referred to (p. 57). Special medicine lures for hunting are also prepared by the hunter.

The Delaware consider the bear and the deer to be the greatest of all animals. The bear is also called "Our Grandfather." Both animals are considered closely akin to the Indian, but the Delaware believe that the bear has the most human-like traits. The antelope, a creature of the later Delaware environment, is regarded as a sacred, pure animal. Of the water animals, the otter is regarded as supernaturally the most powerful.

During the chase, the hunter is careful not to unduly excite the game pursued, since the flesh of such an animal is apt to cause illness when eaten. The same treatment holds for the capture and killing of domestic animals and fowl. Formerly bison, bear, deer, otter, beaver,

the smaller animals, and wild fowl provided meat for the Delaware diet. In the latter period squirrels, rabbits, and domestic animals replaced the increasingly rare, larger species.

After an animal was killed, all parts of it were utilized, the flesh for food; the hide for shelter, clothing, robes, and bags; the bones for implements; the teeth for ornaments; etc. The hide was removed by the hunter forcing his fist between it and the flesh, thus working around the body until the hide was loose. The use of a sharp instrument for this purpose would, it was claimed, cut and thus spoil the hide. All fat from the bison, bear, deer, and domestic animals was saved and stored in a rawhide container. The intestines were cleaned, filled with blood or meat, and cooked. The flesh of the larger animals was usually roasted. A fire was built in a pit and the carcass placed upon a scaffold above it. A slow fire was kept burning, over which the meat was turned until it was thoroughly cooked.

Meat was preserved in one of two ways—by smoke-drying or by immersing it in grease. In drying, thin slices were suspended over a slow fire. In the latter process alternate layers of partially cooked meat and hot lard were placed in a large earthen crock until filled. Slippery elm bark, cinnamon, and allspice were added to the grease for flavor.

Stews and soups were made of fresh meat, to which hominy or corn meal dumplings were added. The flesh of small animals, from which the scent glands had been removed, were also preserved by smoke-drying. If a deer or other animal was killed during the mating season, the animal's testicles were immediately removed. An Indian hunter usually killed only male animals.

Fish were fried or cooked in a stew or soup. Formerly fish were preserved by drying.

*Notes on Mohegan Medicine
Practice and Folk Beliefs*



Smithsonian Institution
National Anthropological Archives

John Tantaquidgeon, 1865-1949

Introduction

DURING the spring of 1930, when I began recording data on Delaware Indian native medical practices for the former Pennsylvania Historical Commission, I discussed with my informant Wi-tapanóxwe, "Walks-with-daylight," the question of tribal kinship between the Mohican or Mahikan of the upper Hudson River and my people—the Mohegan of Connecticut. He stated that the present-day Delaware of Oklahoma recognize the Connecticut Mohegan as their kin. He cited as evidence the reference from the Walam Olum Delaware legend which he translated as follows: "The Easterners and those who were wolves (Mahikan) went northeast." The older Mohegan believed that our ancestors "came from the northwest" (upper Hudson River area), and this tradition was impressed upon the minds of their children. In the words of my great aunt, Emma Fielding Baker, "Don't ever forget it."¹

In view of this probable kinship with the "wolf people of the Delaware," it seems appropriate to include in this volume these notes on plant uses, cures, weather lore, and other beliefs of the Connecticut Mohegan. Of some 200 known descendants only thirty-five reside in Mohegan, New London County, Connecticut, on small tracts of land which have been the home of the Mohegan Indians since the early 1600's.

To my Mohegan informants, now deceased, I am greatly indebted: Lydia M. Fielding, maternal grandmother; Mercy Nonesuch Matthews, last full-blood of eastern Niantic tribes, who was married to Henry Matthews, Mohegan; John and Harriet Tantaquidgeon, parents; Edwin and Nettie Fowler, uncle and aunt; Chief Matahga (Burrill H. Fielding), uncle. I am indebted to the late Dr. Frank G. Speck for counsel and encouragement in my efforts to preserve these fragments of folklore, fast disappearing with the passing of the older members of the remnant Indian groups in southern New England, and for the privilege of working with him during the preparation of his *A Study of the Delaware Indian Big House Ceremony* (Harrisburg, 1931), and *Oklahoma Delaware Ceremonies, Feasts and Dances* (Philadelphia,

¹ Speck 1928: 216, 219.

1937). To my brother Chief Harold Tantaquidgeon, I am indebted for much of the information on the utilitarian applications of plants, which he learned from our father, John Tantaquidgeon. My thanks, also, to Dr. Richard H. Fawcett for advice and counsel while preparing these notes.



Tantaquidgeon Indian Museum

Burrill Fielding (Chief Matahga), 1862-1952

Plants and Plant Uses of the Mohegan of Connecticut

THE FOLLOWING notes on plants and plant uses of the Mohegan have been recorded over a period of years. Beginning in the early 1900's, I accompanied my grandmother, Lydia Fielding, to nearby fields and wooded areas in search of herbs to be gathered and dried for use in making medicine. Also, in the spring and early summer, we found many of the edible food plants referred to by most of us as "weeds" or "greens."

A partial list of Mohegan herbal medicines was presented in a paper read before the American Folklore Society, Philadelphia, 1926; a more detailed account was published in 1928 in the *Forty-third Annual Report of the Bureau of American Ethnology, 1925-1926*. Since then more plants have been identified and additional information recorded from the older members in my own community, as well as from those in neighboring remnant groups at Mashpee and Gay Head, Massachusetts. It is interesting to the student of Indian life to note that the use of many of the plants listed persisted in the communities mentioned until the late 1930's.

Knowledge of the use of plants for curative purposes followed the general pattern of other eastern Algonkian. Certain men and women could effect cures without the use of herbs; others used herbs in addition to their magical practices. These sorcerers—"witches"—were held in high regard. Several "magic plants" are mentioned in Mohegan folklore as having been used by "witches." One is "whistling root," a mysterious plant, known to certain shamans, which is said to have endowed the finder with supernatural power. When placed on a rock it would "whistle and disappear." Other plants mentioned were said to be so potent in the hands of a shaman that they would frighten away savage dogs. The identity of these plants was not divulged. A child born with a "veil" or "caul" was believed to have supernatural power, as was the "seventh son of a seventh son" or the "seventh daughter of a seventh daughter." This knowledge is regarded as personal property; persons possessed of power to heal the sick, either through magical practices without the use of herbs or through the use of herbs, were held in high esteem by members of

the tribe. The fame of certain men and women spread from tribe to tribe, and several informants mentioned itinerant "doctors" within their memory who traveled from place to place healing the sick.

In my community, most of the practitioners were old women. Simple remedies using a single plant or part of a plant were most commonly administered. I have, however, seen my grandmother use



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Mrs. Henry Matthews (Mercy Nonesuch), photographed in 1912. She died in 1913.

the parts of as many as ten plants in preparing a medicine which our people regarded as an excellent spring tonic said to "purify the blood."

Certain rules were observed when gathering and preparing the plants to be used for medicine: (A) do not gather medicinal plants

during "Dog Days"; (B) do not pick the first plant of species desired for a certain medicine—leave it and a short distance away "you will find many plants"; (C) pick only what you need and leave some in reserve. The Indian practiced conservation in its true meaning.

Plants to be used for medicine or food were to be carefully handled. Herbs were dried in the sun before being arranged in bunches or bundles and taken indoors to be stored for future use. It was generally believed that the healing power of the sun added to the potency of the herbs. Practitioners employed small stone or wood mortars for crushing or grinding the ingredients used in preparing medicine to avoid contamination by the use of metal.¹

Water dipped from a running stream was to be dipped against the current if it was to be used in preparing an emetic; with the current if a laxative effect was desired. In the preparation of a decoction, a clouding of the liquid was regarded as an unfavorable sign; its clearness indicated that the "doctor" would be able to effect a cure.

Simple remedies using a single plant or part of a plant predominated, with only a few compound remedies noted. Poultices were frequently employed. It was difficult to ascertain from my informants the amount of leaves, bark, or berries used in preparing certain medicines and the dosage prescribed. The liquid remedies are termed *ambask*, a word derived from *ambi*, meaning "liquid."

MAPLE (*Acer saccharum*): Inner bark taken from the south side of the tree was used in making a cough remedy. The sap was used as a sweetening agent, and as late as 1928 two Mohegan Indians tapped the few remaining sugar maples in the community to obtain sap for making maple syrup.

YARROW (*Achillea Millefolium*): Tea made from dried leaves was taken for relief of liver and kidney disorders.

SWEET FLAG (*Acorus Calamus*), "muskrat root": The dried root was cut into small pieces and steeped in a small quantity of water to make a "warming drink" for colds, stomach pains, and suppressed menses. A small piece of the root carried on the person was believed to "ward off sickness." The root was also chewed to insure good health.

SPECKLED ALDER (*Alnus incana*): Twigs were steeped and the

¹True also in Gay Head and Mashpee, Massachusetts, Indian communities. See Tantaquidgeon 1930: 17.

liquid was used as a liniment to allay pain caused by sprains and bruises, and for headache and backache.

PEARLY EVERLASTING (*Anaphalis margaritacea*), "Indian posy": Leaves were infused for cold remedy.

MAY WEED (*Anthemis Cotula*), "chamomile": Infusion of leaves was administered cold to reduce fever. It was believed to benefit the entire body when taken cold.

SARSAPARILLA (*Aralia nudicaulis*): Root was combined with other plants and roots to make a spring tonic.

GROUND NUT (*Apios tuberosa*): See FOODS.

BURDOCK (*Arctium minus*): Leaves were bound on affected parts to relieve rheumatic pains.

PIGWEED (*Amaranthus retroflexus*): Infusion of leaves was administered to relieve hoarseness.

JACK-IN-THE-PULPIT (*Arisaema triphyllum*), "Indian turnip": the dried root was steeped and the liquid was used as a linament to allay pain. It may be diluted and used as a gargle for sore throat; but it has a toxic effect if taken internally.

SNAKEROOT (*Aristolochia Serpentaria*): Pounded or mashed root was used as a poultice to cure snake bite.

MILKWEED (*Asclepias syriaca*): See FOODS.

PLEURISY ROOT (*Asclepias tuberosa*), "butterfly weed": The dried root was used in making a remedy for pleurisy.²

INDIAN TEA (*Aster umbellatus*): A tea made from dried leaves served as a beverage. It was said to be "good for the stomach."

WORMWOOD (*Artemisia Absinthium*): Infusion of leaves was administered as a vermifuge.

WILD INDIGO (*Baptisia tinctoria*): Root was steeped in a small quantity of water to make a healing lotion for cuts and bruises.

SPICEWOOD (*Benzoin?*): Infusion of leaves was used as a vermifuge. Also fresh leaves chewed by children and adults acted as a vermifuge.

BARBERRY (*Berberis vulgaris*): Juice from the berries was added to cold water to reduce fever. Berries were boiled in molasses and stored in crocks for use when needed. A cooling drink is produced by pouring cold water over a small amount of the above mixture.

BLACK BIRCH (*Betula lenta*): Inner bark was used in making a tonic.

² See Tantaquidgeon 1942: 31.

WILD MUSTARD (*Brassica nigra*): Fresh leaves were used as a poultice to relieve toothache or headache; but it could cause blistering if left on too long.

PEPPER GRASS (*Capsella Bursa-pastoris*): The seed pods were steeped and the liquid administered to relieve stomach pains. It acted as a vermifuge.

CHESTNUT (*Castanea dentata*): Infusion of leaves was believed to cure whooping cough.



Painting by Georgetta Brickner

Pleurisy Root or Butterfly Weed

Asclepias tuberosa

BLUE COHOSH (*Caulophyllum thalictroides*): Referred to as "very rare," this root was used in making a medicine for kidney disorders.

PIPSISSEWA (*Chimaphila umbellata*): Infusion of leaves was applied to blisters.

THISTLE (*Cirsium arvense*): Infusion of leaves was used as mouth wash for infants.

GOLDEN THREAD (*Coptis trifolia*): Infusion of leaves was used as mouth wash for infants.

WHITE DAISY (*Chrysanthemum Leucanthemum*): See TONIC.

RATTLE BOX (*Crotalaria sagittalis*): Root used to make medicine for purifying the blood.

JIMSON WEED (*Datura Stramonium*), Jamestown weed: This was regarded as "a powerful plant" by informants. Leaves were crushed and applied to cuts.

WILD CARROT (*Daucus Carota*), Queen Ann's lace: Blossoms were steeped and the liquid administered to sufferers from diabetes. Flowers must be in full bloom when picked to prepare this remedy.

BLUE WEED (*Echium vulgare*): Referred to as "a rare plant," the root was used in making medicine for kidney disorders.

RATTLESNAKE PLANTAIN (*Epipactis pubescens*): Mashed leaves were used to wipe out mouths of infants to prevent soreness.

BONESET (*Eupatorium perfoliatum*): One of the more highly regarded herbs by most eastern Indian tribes. Infusions of leaves were administered in small doses for colds, fever, and general debility. In treating colds, the tea was drunk hot at night and cold in the morning.

FIRE BUSH (*Euonymus atropurpureus*), "Wahoo": Infusion of leaves used for physic.

STRAWBERRY (*Fragaria virginiana*): See FOODS, DYES.

WINTERGREEN (*Gaultheria procumbens*): Tea made from leaves was "a warming beverage" and a kidney medicine.

HUCKLEBERRY (*Gaylussacia baccata*): See FOODS, DYES.

WITCH HAZEL (*Hamamelis virginiana*): Twigs and leaves were steeped to make a soothing lotion for cuts, bruises, and insect bites.

PENNYROYAL (*Hedeoma pulegioides*): Tea made from leaves was "warming and good for stomach."

HOPS (*Humulus Lupulus*): Infusion of blossoms was taken in small doses several times daily to relieve nervous tension.

BALSAM (*Impatiens biflora*): The buds were crushed to make a poultice for burns, cuts, and bruises.

ELECAMPANE (*Inula Helenium*): Leaves were steeped and the liquid used in the treatment of tuberculosis. It was also said to cure colic in horses.

BLUE FLAG (*Iris versicolor*): Root was pulverized and mixed with flour and used as a poultice to allay pain.

MOUThWART (*Leonurus Cardiaca*): This was a highly regarded herb and was used specifically in making medicine for curing diseases

peculiar to women. An infusion of the leaves was taken several times daily.

WILD MINT (*Mentha canadensis*): Infusion of leaves was beneficial to stomach.

PEPPERMINT (*Mentha piperita*): Infusion of leaves was used as a vermifuge for children and adults.

SPEARMINT (*Mentha spicata*): Infusion of leaves was used as vermifuge.



Painting by Georgetta Brickner

Wild Carrot or Queen Anne's Lace

Daucus Carota

HORSEMINT (*Monarda punctata*): An infusion of leaves was used to reduce fever.

INDIAN PIPE (*Monotropa uniflora*): Liquid from root steeped in small quantity of water was said to be as effective as quinine in relieving pain caused by colds.

SWEET FERN (*Myrica asplenifolia*): Leaves steeped and liquid used as a wash to cure the toxic effects of poison ivy (*Rhus Toxicodendron*).

BAYBERRY (*Myrica sp.?*): Bark steeped and liquid administered for kidney disorders.

CATNIP (*Nepeta cataria*): Infusion of leaves as cure for colic in infants.

GINSENG (*Panax quinquefolius*): This herb was highly valued as a cure-all. The root was used singly or combined with others in making a tonic.

WOOD BETONY (*Pedicularis canadensis*): Vaguely referred to as a tea, having been made from the leaves and administered to induce an abortion.

POKE (*Phytolacca decandra*), "skokey (snake) berries": Root was said to be poisonous if eaten, but the young shoots were cooked and served the same as spinach or asparagus. The berries were mashed to make a poultice for sore breasts. Also juice from the berries made a dark blue stain used for painting designs on splint baskets.

NORWAY SPRUCE (*Picea Abies*): Sap or gum was applied to relieve the pain caused by boils and abscesses.

WHITE PINE (*Pinus Strobus*): Infusion of dried inner bark was used as a cough remedy. The sap or gum was applied to boils and abscesses to relieve pain.

PLANTAIN (*Plantago major*): Fresh leaves were bound on snake and insect bites to "draw out the poison." The rough or under side was used to draw out the poison, and the smooth side was said to have healing qualities.

HEAL ALL (*Prunella vulgaris*): The leaves made "a cooling drink to reduce fever," which was also used to bathe the patient.

WILD PLUM (*Prunus americana*): Twigs were steeped to make a remedy for asthma.

WILD CHERRY (*Prunus serotina*): The ripe cherries were placed in a jar and allowed to ferment in their own juice for about a year. The liquid was used as a remedy for dysentery. Wild cherry bark and Boneset (*Eupatorium perfoliatum*) leaves steeped together made a tea for curing colds. "Take hot at night and cold at morn."

CANKER LETTUCE (*Pyrola elliptica*), "shin leaf": The leaves were steeped to make a mouth wash to cure canker sores and sore throat.

APPLE (*Pyrus Malus*): See FOODS, UTENSILS.

WHITE OAK (*Quercus alba*): Inner bark was steeped and the liquid used as liniment to allay pain in humans and horses.

HORSERADISH (*Rorippa Amoracia*): Mid-rib was removed from leaves and bound on face to relieve toothache. Left on too long, this plant could cause blistering.

SUMAC (*Rhus typhina*): Berries made a gargle for sore throat. It was also used diluted as a beverage.

BLACKBERRY (*Rubus hispidus*): This is a small running vine producing a very small berry having only three sections. The juice from the berries was administered as a cure for dysentery.

BLACKBERRY (*Rubus nigrobaccus*): See FOODS.

SORRELL (*Rumex Acetosella*), "sour weed": Chewing fresh leaves was said to be "good for the stomach."

DOCK (*Rumex crispus*): Root used in tonic. When used as medicine or food (leaves cooked) this was said to "purify the blood."

SAGE (*Salvia officinalis*): Chewing of fresh leaves was believed to benefit the entire body. Infusion of fresh or dried leaves served as a beverage. Sage tea also acted as vermifuge.

ELDER (*Sambucus canadensis*): The flowers were dried for use in making a tea, which was administered to infants to cure colic. If in preparing the inner bark for medicine, it was scraped upward, it acted as an emetic; if scraped downward it acted as a laxative.

SASSAFRAS (*Sassafras officinale*): The root, leaves, and bark combined with other herbs in making a tonic. The young shoots were placed in water and allowed to remain in the sun until a mucilaginous substance formed which was used as a soothing wash for sore eyes.

BLOODROOT (*Sanguinaria canadensis*): Infusion of inner bark of the dried root was taken internally to "purify the blood." The root exudes a dark red juice called "Indian paint." It was mixed with animal fat and used as face paint. It was also used to paint designs on splint baskets. See DYES.

SPIKENARD (*Smilacina racemosa*): Leaves were steeped to make a cough remedy. A medicine for stomach disorders was made by steeping small pieces of the root.

SKUNK CABBAGE (*Spathyema foetida*): A piece of the leaf rolled to the size of a pea was given to a person suffering from epileptic seizures.

HARDHACK (*Spiraea tomentosa*): Infusion of leaves taken for dysentery.

TANSY (*Tanacetum vulgare*) and YARROW (*Achillea Millefolium*):

Leaves soaked together in cold water made a drink to improve the appetite and benefit the stomach generally.

DANDELION (*Taraxacum officinale*): Root was combined with other herbs in making a tonic (see TONIC). Young plants were boiled in salted water or with salt pork; blossoms were combined with white daisy blossoms in making wine; and a strong infusion of the dried leaves acted as a physic.

WHITE CLOVER (*Trifolium repens*): Dried leaves were steeped to make a remedy for coughs and colds.



Painting by Georgetta Brickner

Spearmint

Mentha spicata

NETTLE (*Urtica dioica*): Young plant for food. See FOODS.

AMERICAN ELM (*Ulmus americana*): Inner bark was steeped and liquid used as a remedy for coughs and colds.

SLIPPERY ELM (*Ulmus rubra*): A mucilaginous substance produced by chewing the inner bark would cure a sore throat. It was also considered to be soothing to the lungs.

HIGHBUSH BLUEBERRY (*Vaccinium corymbosum*): See FOODS; DYES.

GREAT MULLEIN (*Verbascum Thapsus*): Dried leaves were smoked to relieve asthma and sore throat. Leaves were steeped and mixed with molasses for cough medicine.

WILD GRAPE (*Vitis Labrusca*): Leaves were bound to affected part to relieve pain. Leaves were prepared by removing mid-rib and rubbing them slightly between the hands. My mother and several other relatives used leaves from any cultivated grape vines.

PRICKLY ASH (*Xanthoxylum americanum*): Inner bark was steeped and the liquid taken in small doses for heart trouble. Administered in alternate three-day periods.

CORN (*Zea Mays*): See FOODS; UTILITY; CEREMONIAL. Dried cobs were boiled, the liquid being used as a wash to cure the toxic effects of poison ivy (*Rhus Toxicodendron*).

SPRING TONIC: steep together the following roots, barks, and leaves: Roots: sassafrass (*Sassafras officinale*), ginseng (*Panax quinquefolius*), sarsaparilla (*Aralia nudicaulis*), sweet flag (*Acorus Calamus*), spikenard (*Smilacina racemosa*). Barks: black birch (*Betula lenta*), wild cherry (*Prunus serotina*). Leaves: burdock (*Arctium minus*), boneset (*Eupatorium perfoliatum*), motherwort (*Leonurus Cardiaca*). Entire plant: dandelion (*Taraxacum officinale*).

Some empirical cures not employing herbs, and beliefs associated with them, which were recorded from members of the community over the past few decades, are:

To cure toothache and prevent recurrence, catch a black racer snake (*Bascanion constrictor*) alive and bite it from head to tail. (In Iroquois belief the green snake [*Liopeltis vernalis*] takes the place of the black racer.)

Fresh cow manure bound on the face will cure toothache.

The skin of a black racer worn around the waist next to the skin will cure rheumatism.

To relieve chapped lips, rub the index finger behind the ear and then over the lips.

Ear wax applied to insect stings will allay pain.

To cure hiccoughs, think of a gray horse. Another remedy is to suddenly engage the person's attention, thus "frightening away the hiccoughs."

Skunk oil or goose grease, obtained by melting the fat, was taken internally for colds. The oil from the skunk is "powerful" and only

a few drops were administered at one time. It was also rubbed on the chest to relieve congestion. The odor of the effluvium of the skunk is considered strength giving.

Onion poultices were used to relieve congestion in the head and lungs. The method was to roast onions in coals or hot ashes, remove the inner parts or "hearts," and mix with a little olive oil. This mixture was spread on pieces of flannel or a small quantity placed in flannel bags, which were bound on the chest and back, and sometimes on the soles of the feet and the wrists of the patient. A cough syrup was made by allowing onions and a little sugar to simmer over a very low heat. The insertion of a small piece of onion "heart" in the ear was believed to relieve earache.

Slices of salt pork bound on the throat will relieve soreness, and will also allay pain caused by inflammation. In cases of measles or chicken pox, the rind of salt pork is rubbed over areas of rash to relieve the itching.

As a remedy for rheumatic pain, allow a quantity of earthworms and ants to decompose in a bottle and rub the mash on the affected part.

To clear nasal passages, place a piece of leather in the fire and inhale the fumes.

A horse chestnut (*Aesculus glabra*), "buckeye," carried in the pocket, will relieve the pain of rheumatism. To prevent rheumatism, a potato should be carried in one's pocket. When the potato becomes dried it should be discarded and replaced by a fresh one.

A tea made by pouring hot water over a hen's gizzard, which has been previously dried, will relieve indigestion.

"Powder post" is used as a healing powder for infants. It is obtained by scraping the powder from decayed beams and rafters in old houses.

"Soot Tea" will relieve colic in infants. It is prepared by pouring boiling water over a small quantity of soot taken from the chimney.

April snow, melted, can be used as an eyewash.

Rub saliva on the eyes to relieve soreness.

Urine will cure chapped hands.

May snow water is good for the complexion.

Mutton tallow will heal cuts and chapped hands. Rub on boots to make them waterproof.

Sheep excrement mixed with the urine of the youngest child of the

family was formerly administered as a measles remedy. It was thought to have been effective in "driving out" the disease.

To relieve toothache, the following poultices were applied:

(a) Lye poultice, prepared by mixing a small quantity of wood ashes, corn meal or flour, and water together to form a paste.

(b) A poultice made of flour mixed with rum and sprinkled with pepper.

(c) Spice poultice, prepared by mixing flour, ginger, cloves, pepper, and allspice with a little water to form a paste.

(d) Fresh cow manure bound on face of sufferer.³

A poultice made by mixing snuff and lard was applied to the chest to relieve congestion.

³ Used by Chief Matahga as late as 1930.

UTILITARIAN APPLICATIONS OF PLANTS

BOTANICAL NAME	COMMON NAME	NATIVE USE	PART USED
<i>Acer saccharinum</i>	Sugar or Hard Maple	Frames for dwellings Bowls, ladles, scoops, spoons, stirring paddles	Young trees Logs
<i>Apocynum cannabinum</i>	Indian Hemp	Tumplines, lashing, cordage	Stalk
<i>Berberis vulgaris</i>	Barberry	Pipe stems	Small branches
<i>Betula lutea</i>	Gray Birch		
<i>Carya glabra</i>	Pignut Hickory	Frames for dwellings, bows, handles for tools	Saplings
		Small drums, lashing	Bark
<i>Fraxinus nigra</i>	Black Ash	Baskets, bows, handles for tools, brushes, bows, pipe stems, arrows	Logs from young trees for basket splints; small branches and twigs for other items
<i>Hamamelis virginiana</i>	Witch Hazel	Brooms, brushes	Young trees, twigs
<i>Juniperus virginiana</i>	Red Cedar	Frames for dwellings Lashing, cord	Young trees Bark
<i>Liriodendron tulipifera</i>	Tulip (Yellow Poplar)	Lashing, cordage	Bark
<i>Nyssa sylvatica</i>	Black Gum (Pepperidge)	Mortars	Log
<i>Picea rubra</i>	Spruce	Lashing	Inner bark from root
<i>Pyrus Malus</i>	Apple	Spoons, scoops, mortars, bowls	Logs, burls
<i>Quercus alba</i>	White Oak	Axe and hammer handles, baskets	Cut lengths of wood from young trees
<i>Sassafras officinale</i>	Sassafras	Pipe stems	Small branches
<i>Tilia americana</i>	Basswood	Wigwam covering Lashing	Bark Inner bark from root
<i>Typha latifolia</i>	Cattail	Mats (wigwam covering)	Leaves
<i>Ulmus fulva</i>	Slippery Elm	Lashing	Inner bark from root
<i>Vitis Labrusca</i>	Grape	Baskets, lashing	Vine
<i>Zea mays</i> (several species)	Corn	Mats (wigwam covering) Baskets, dolls Dolls, game	Husks and stalks Husks Cobs

Foods

MOHEGAN gardeners of my father's generation observed certain rules when planting seeds to insure a bountiful harvest: Vegetables of the climbing variety should be planted when the moon is waxing; root crops should be planted when the moon is waning. Vegetables grow best on moonlight nights; this applies particularly to cucumbers. White beans should be planted when chestnut (*Castanea dentata*) trees are in full bloom.

Of the several varieties of corn (*Zea Mays L.*) cultivated, the variegated was generally referred to as "Indian" or "squaw corn."¹ Corn was not only a staple food product, but was also a significant factor in the spiritual life of the several tribes studied.² "It nourishes the soul as well as the body." It was time to plant corn "when the dogwood or shadblow leaves are the size of a squirrel's ear." Seed corn was soaked in warm water overnight before planting.³

Due to the influence of the neighboring Iroquois, corn, beans, and squash were planted close together, but without the usual ceremonies which characterized the Iroquois planting season. In early times, the Mohegan planted corn in hills, with an occasional squash seed and rows of beans planted among the corn hills. This practice of keeping the three vegetables together continued throughout the years, apparently without the Mohegan having learned the Iroquois legend of the "Three Sisters," which are corn, beans, and squash.

When the corn silk turns brown it is ready to harvest. During late August, the Mohegan held a "Green Corn" or "Wigwam Festival,"⁴ said to have been a survival of the ancient "Green Corn Dance" or "Brush Arbor Ceremony." This modified version was the only ceremony connected with the cultivation of corn performed by the Mohegan, and in later years was held to raise funds for the Mohegan Congregational Church. The last festival was held in 1938.

¹"Squaw" or "Squannit" suggests the possibility that the female deity who exercised control over vegetation was not remembered by my Mohegan informants.

²The Delawares held the "corn spirit" or "Mother Corn" in reverence, and detailed accounts of certain ceremonials may be found in Speck 1937a: 61, 79, 102. See also Speck 1931.

³According to Waugh (1916: 18), the Iroquois had a special "medicine" in which they soaked the seed before planting.

⁴See Speck 1928: 254-255.

Yokeag (dried corn kernels, parched and pulverized), succotash (corn and beans), and hulled corn are favorite foods of the Mohegan. Yokeag was the "traveling" or "journey food" mentioned by Williams, Zeisberger, and Waugh as indispensable when on long journeys. It was light to carry and ready to eat. A small quantity of the meal and a drink of water sustained the traveler for many hours.⁵ Yokeag was made in quantity for sale to non-Indians who attended the Mo-



Painting by Georgetta Brickner

Poke

Phytolacca decandra

hegan Green Corn Festival, to be used as a cereal. With the addition of a little milk, it becomes a nourishing breakfast food. A gruel made by slowly cooking yellow corn meal (unroasted corn) for several hours is a beneficial drink for persons convalescing from prolonged illness, or following a digestive upset.

At harvesttime, corn and other vegetable crops were shared with

the less fortunate in the tribe. Hunters shared the flesh of wild game with their neighbors. Believing that all foods are the gift of the Creator, it was thought that one should express his thanks for these blessings by sharing with others. Although garden space is limited and crops considerably smaller than in years past, a few Mohegan descendants continue to observe this custom of sharing.

Of the many edible food plants, it is said that "in the spring men and animals need to eat the green things." The following "greens" may be cooked in a small amount of salted water, and salt pork or other meat may be added if desired. Plants should be parboiled and the first water drained off to remove some of the bitter taste.

For "mixed greens" the following are combined: pigweed (*Amaranthus retroflexus*), mustard (*Brassica nigra*), plantain (*plantago major*), dock (*Rumex crispus*), nettle (*Urtica dioica*).

The following are cooked singly: milkweed (*Asclepias syriaca*), lamb's-quarters (*Chenopodium album*), cowslip (marsh marigold) (*Caltha palustris*), poke (*Phytolacca decandra*), dandelion (*Taraxacum officinale*).

The root of the "Indian potato" or "ground root" (*Apios tuberosa*) was cooked fresh or dried. The dried root was ground to make a flour which was used for thickening stews.

The many wild fruits and nuts formerly found in the area were eaten fresh or dried (see accompanying charts).

⁶ Williams 1827: 33; Zeisberger 1910: 22; Waugh 1916.

Miscellaneous Signs and Omens

WHEN the "top" (blossom) of the narrow dock (*Rumex crispus*) turns brown, huckleberries are ripe.

Shadbush (*Amelanchier arborea*) and dogwood (*Cornus florida*) blossoms herald the shad fishing season.

The best time to dig clams is when the moon is full. At that time they are nearer the surface of the flats and are believed to be larger.

If hogs are butchered when the moon is waning the pork will shrink. The best time to butcher is when the moon is full. This also is the time to plant corn and beans.

In the evening when you hear a whippoorwill (*Caprimulgus vociferus*) it is time for the children to go to bed.

Whatever you are doing when you first hear the peep frogs—spring peepers—(*Hyla crucifer*) in the spring, you will continue to do throughout the year.

If a hunter can hang his powder horn on the points of the new moon, it is called a "wet moon." It is full of water and he cannot go hunting. If the points are turned downward, he knows that the water has all run out and the weather will be more favorable.

To see the new moon over your right shoulder indicates good luck, over the left shoulder, ill luck (also Virginia Powhatan).

If you wish on the new moon, your wish will be granted. To see the new moon through the window pane is a sign of disappointment.

It is believed that births are controlled by the moon's phases. Several informants stated that births usually occur during the new or full moon (also Iroquois).

Incoming tides may bring renewed strength to a critically ill person. "Life may go out as the tide ebbs."

If you wish on a shooting star your wish will come true. Some informants believed that to see a shooting star indicated that there would soon be a death in the village.

Spiders bring good luck. Do not kill them. If you see a spider on your dress, you will soon have a new dress. Always stop and make a wish if you see a spider weaving its web. This is a sign of good luck and your wish will be granted.

A cricket chirping in the house brings good luck.

If a bird flies in through an open window and out again without touching the walls or furniture, it brings good news. Should it appear confused in attempting to find its way out again, it brings news of the death of a relative (also Rappahannock).

A bee flying in through an open window brings a stranger.

When a screech owl (*Otus asio*) is heard, it is a sign of death in the village.¹

A dog howling is a sign of death. My informants stated that the dog's nose points in the direction where the death will occur.

A snake crossing your path is an evil omen. The same is said of a black cat.

If a hen crows it is an evil omen.

If you kill a bat you kill your brother.

Never cut the fingernails of a baby. The nails should be bitten off until the child is one year old to prevent him from becoming a thief.

Clipping the ends of the hair when the moon is waning not only strengthens the hair but makes it grow more luxuriantly. If you throw hair combings out the door you will have frequent headaches (also Chickahominy).

If you burn the bones of animals your bones will ache.

When you pull a child's tooth keep it. If thrown out, an animal might get it, and the child will then have large, crooked teeth.

Bones of the skeleton of a snake are believed to be poisonous. When found, the bones should be buried lest someone step on them.

When children are heard singing at their meals, their parents silence them because of the belief that the father or mother will die.

You will have bad luck if you sing at the table.

If you sing before breakfast, you will cry before night.

If you put your clothing on wrong side out in the morning, you will have good luck if you wear it that way all day.

A ringing or buzzing sound in the right ear indicates that you will soon hear good news, in the left ear, bad news. If your right ear burns, someone is saying something good about you, if your left ear, something bad. At night, a ringing sound in either ear brings good news.

If your right eye itches, you will laugh, if the left eye, you will weep.

¹ Before raiding eastern Algonkian villages, Mohawk war parties would send out scouts who used the call of the screech owl as a signal to attack. The writer's Mohegan informants did not mention this fact in connection with the common belief that the call of the screech owl is an evil omen.

Itching in the palm of the right hand indicates that you will shake hands with a stranger; in the left hand, that you will receive a gift.

The eastern phoebe (*Sayornis phoebe*) is called "the money bird."² If when you hear the bird call "phoebe," you say "tah but" (thank you), you will receive a gift of money.

The child born with two crowns on the top of his head "will travel far." A child so blessed will be of superior intellect and will succeed in all undertakings.³

It was also a common belief that a child born with a "veil" (caul) was blessed with supernatural power which would enable him to foretell events. The caul was preserved and kept as a good luck charm. It is said that sea captains and whalers were eager to obtain them to carry when they went to sea.⁴

To locate underground water, certain individuals used a crotched stick of witch hazel (*Hamamelis virginiana*), wild apple (*Pyrus Malus*), or wild plum (*Prunus americana*). Witch hazel might also be used to locate buried treasure.

It was an old Mohegan custom for a man to carry a long staff when out walking. Many years ago, before starting on a hunting trip, a man would stand his staff on the ground and let it fall in order to determine the direction to follow in pursuit of game.

²Also in Mashpee and Gay Head, Massachusetts. As late as 1930 it was not uncommon to hear informants say "Tah but" when they heard the "money bird." Several Mohegan descendants, the writer included, still observe this custom.

³Also Oklahoma Delaware.

⁴Also Gay Head, Massachusetts.

Weather Lore

THE chirping of the gray treefrog (*Hyla versicolor*), commonly called "tree toad," indicates the approach of damp weather (also Powhatan and Iroquoian tribes). Frogs are not killed lest excessive rain follow (also Iroquoian).¹

The whistling of the quail (*Colinus virginianus*), "bobwhite," means more wet.

Webs (fairies' laundry) on the grass in the early morning are an indication of intense heat by midday.

The locust (*Acrididae* family) foretells of very warm weather. Six weeks from the time the locust is first heard there will be frost.

If the sky is unusually red at sunrise, it will rain before the day is over.

When the sun casts slanting rays through the clouds, it is "drawing water." It will rain the following day.

When the wind blows the leaves "inside out," it is going to rain.

Three foggy mornings in succession bring rain.

"Mackerel sky" (cirro-cumulus clouds) also indicates a rain storm.

Flocks of wild geese (*Branta canadensis*) were always carefully observed. When they flew north, the weather changed and the spring season was ushered in, when they flew south, winter was fast approaching. If the geese flew low and were disorganized, it was an indication that a storm was near. When the geese flew high in perfect "V" formation, fair weather would prevail.

If the smoke from a fire rises during a storm, the rain will soon cease to fall; if it hovers near the ground in a cloud, the weather will remain unsettled.

If chickens pick for food around the yard while it is raining, you may be assured that the rain will continue to fall for some time. It is also said that chickens "oil themselves" by picking around their wings and backs just before a storm. When a rooster crows during a storm he says, "it's going to clear off today."

Crowing before midnight indicates a change in the weather.

Crowing on the doorstep brings a visitor.

If the sun shines when it is raining, the Devil (jebai) is "whipping his wife." It will rain again the following day.

¹Respect for the frog is explained in some general Algonkian beliefs concerned with childbirth, as well as rain. This topic deserves attention.

If the sun shines when it is snowing, the Devil (jebai) is "plucking his geese." It will snow the following day.

When a hog carries sticks in its mouth, it is going to rain (also Nanticoke and Virginia Powhatan).

Wind from the south brings rain, from the east mild weather; the west wind indicates clearing or prevailing fair weather.

When you observe clouds commonly referred to as "mare's tail" or "witch's broom" in the sky, high winds may be expected.

When a cat spends much time "washing its face and ears," a storm is close by. A cat running and jumping about is an indication that windy weather is in the offing.

A "sun dog" is a sign of stormy weather (also Wabanaki and Montagnais-Naskapi).

A circle around the moon foretells stormy weather. The number of stars within the circle is counted in order to determine the number of days which will pass before the storm is due.

If during the winter months, the moon becomes partially concealed by a hazy atmosphere, it is said that "the moon is wading through snow."

Explosions or "puffs" in a fire, when hard wood is being burned, are signs of rain (also Iroquois).

Ice on a pond or lake making a loud report means that it will soon thaw (also Iroquois).

During a period of stormy weather, if there appears a patch of blue sky large enough to make a pair of men's trousers, fair weather may soon be expected.

Thunder in the early spring is a sign that winter is over (also Iroquois).

Thick husk on corn is a sign that the winter will be extremely cold; thin husk indicates that the season will be mild.

A display of northern lights, aurora borealis, is an indication of colder weather to follow.

An unusually mild day in winter is called a "weather breeder." It is wise to prepare for a storm.

When the foliage is unusually thick and crops abundant, especially wildberries, fruits, and nuts, a long, cold winter may be expected.

To hear talking or wood chopping from a greater distance than usual indicates that a storm is brewing (also Iroquois).

Dandelions blooming late in the season are a sign of an "open winter."

Dreams

THE Mohegan regarded all dreams as significant. My informants expressed belief in dreams as signs or omens of future events, as did our ancestors. Through dreams one received advice and guidance from those "in the spirit world." Sometimes they bore messages of hope and encouragement and sometimes warned one of the impending danger or death. If a person had the same dream three nights in succession, it was expected to come true. Should the dreamer wish to prevent its recurrence, he must turn the soles of his shoes upward before retiring. Telling the dream before breakfast would bring ill fortune.

One young woman told of the following dream which occurred before or during the illness of a relative:

On Fort Hill, near the ancient council seat of Chief Uncas, a blazing fire is seen. A huge pot is suspended over the flame. An Indian, tall and straight, wrapped in a brightly colored blanket and wearing a war bonnet, is stirring the contents of the pot with a long-handled wooden paddle. If the boiling substance rises to the top and flows over the sides, the person who is ill dies. If it does not overflow and ceases to boil, the person will recover.

Another informant told of a recurrent dream in which a black monster with terrible claws and wide spreading wings appears. This, he said, was a sign that a member of the tribe would die within a short time.

It was a common belief that to dream of a black person or animal was a sign of trouble and disappointments.

To dream of a snake is a sign that you have enemies. If you kill the snake in your dream encounter, you can overcome your enemies.

To dream of vermin warns one of illness in the family.

To dream of fruit or berries out of season foretells a "quarrel without reason" (the Delawares refer to this type of dream as "dreaming ahead"). To dream of snow or ice at any season of the year denotes good luck.

To dream of clear running water denotes good luck, muddy water, ill luck.

A Mohegan woman had a dream in which the spirit of her mother appeared and told her to tell her people to continue with their plans

for the annual "Wigwam" or "Green Corn Festival." The message inspired the people, and with renewed courage they set to work determined to carry out the old custom, that it might "please the spirits of the departed ones." The affair was a great success.

Some years ago, while walking near our ancient burial ground in the old Fort Shantok area, the writer had the good fortune to find a perfect stone axe. Upon showing it to some of my relatives, several of them remarked that "it was the spirit of one of my ancestors which led me to the spot where the axe was found." They believed it to be a sign of "good luck" and that it was intended to encourage me in my work.

Dreams figured prominently in the attempts of individuals to locate the buried treasures of Captain Kidd. One requirement was that a person dream of a certain site three nights in succession, and then with a companion go at midnight to the spot in the dream and dig in silence. My uncle, Chief Matahga (Burrill H. Fielding), gave the following account of his experience:

For three nights I had the same dream. I was walking in the old Shantup burying ground along the banks of the river. There I saw a stand of three white birches near a flat rock. I decided that was the place to dig. So I asked Henry Dolbeare, a Mohegan Indian, to go with me on a certain night. At last the time came and we took our shovels and went to the burying ground, arriving there about midnight. There were the three white birches and the flat rock, the same as in my dream. It was a bright, moonlight night. We began digging and not a word was said. Just as I felt my shovel hit what seemed to be a board, a large black animal ran between me and my partner. We let out a yell and ran from the place leaving our shovels behind. After a few days, we went and got the shovels, but never tried digging at midnight again.¹

¹ My uncle and his companion were in their early twenties when this incident took place. Mashpee and Gay Head, Massachusetts, informants gave similar accounts of quests for buried treasure. It was generally stated that one of Captain Kidd's men was beheaded and his body buried with the treasure. His spirit appeared to certain individuals in dreams and revealed the hiding place. Sometimes the dreamer saw a headless man driving a yoke of oxen—supposedly the guardian of the much sought treasure.

Appendices

APPENDIX I

Nanticoke Folk Beliefs

MY reason for incorporating the following material is based upon the close historical affinities of the Nanticoke with the Delaware over a period of time so long that both groups must be considered ultimately to have sprung from a common source. The intimate association of the two peoples has been maintained through the period of their co-residence in southeastern Pennsylvania and continued during the course of their migration northward along the Susquehanna River to the Iroquois. It seems hardly necessary to point out again that branches of both tribes were adopted by the Six Nations at the same time,¹ and that they have maintained their representatives in the Council of the League uninterruptedly down to the present day.

While the Delaware have preserved some semblance of their former culture despite the varied accidents which befell them in their northward and westward flight, the Nanticoke have more thoroughly succumbed to acculturation from alien influences. Yet it is the latter people only who have left descendants within the area formerly occupied by them in the Delaware Bay region, the mixed community located in the district known as Indian River Hundred, Sussex County, Delaware. In view of what has already been written about this community,² it seems hardly necessary here to review its history.

The Nanticoke informants employed in this investigation were Chief Russel Clark, his wife, Florence Clark (née Drain) and their son Ferdinand, who later succeeded to his father's office; the three Wright brothers, Warren, Elwood, and Walter; Willie Harmon, his wife, Annie, and their daughter, Janie; Lincoln Harmon and his wife, "Patia"; Levin Street and family, and a Mrs. Bumberry; and lastly Howard and Eliza Anne Johnson. It may be of interest that Chief Clark some years ago took the name of Wynyáco, the term held by the Nanticoke emperor.

It will be obvious to the ethnologist that no attempt is made to identify the following data as characteristic of Nanticoke culture of the pre-European period. In comparison with the preceding Delaware

¹ In 1735 at the invitation of the Cayuga.

² Speck 1915, 1922, and 1927.

data, the notes to follow represent a fusion of disparate culture influences, the total effect of which is very non-Indian in character. For the layman, attention is called to the assumption that the Nanticoke, like other native peoples, were actuated by a spirit of inquiry into the natural world, such as to lead them to experiment with plants and plant substances introduced as the result of white contact. Such post-European elements and their application to useful ends belong to the later culture of the Indians, and accompanied changes in their physical and social environment as well as in their racial composition. The task of identifying these cultural components and of determining their origins is not one for the present. The question, therefore, of the sources of Nanticoke ideas and practices of the present day is not included in the scope of this paper. The material has its bearing upon the development of the Nanticoke as an ethnic community, even though its analysis be left for a wiser day of culture reckoning.

My own experience with the Nanticoke was gained through the gathering of medical folklore, a task started independently in 1921 and continued during annual visits thereafter until the Pennsylvania Historical Commission provided funds for this research in 1931. I have attempted to incorporate in the present study all previously compiled material, both published and unpublished, concerning the subject of my immediate interest. That more remains to be collected from the inexhaustible memories of the Nanticoke descendants scarcely needs be added. One community in particular, at Cheswold, Delaware, which comprises people of similarly hybrid ancestry, still represents an untouched source for the collection of new material. This particular group was thought by Chief Clark to be more distinctly Delaware than Nanticoke, so far as possible Indian blood was concerned.

MEDICINE PRACTICES

A number of methods are in use among the Nanticoke to avert or cure whooping cough. It is believed that a string or necklace of deer-skin will protect the wearer against this disease.

If a woman marries without changing her name, i.e., marries a man of the same name, she can cure her children of whooping cough by feeding them bread stolen from her neighbors. One informant stated,

* I have included my own version of those Nanticoke folklore items which originally appeared in Speck 1915. This duplication has seemed advisable in order to bring together the present collection of data in one place.

however, that it is bread stolen from such a woman that effects the cure. In the first, a friend was often asked to leave bread where it could be taken unseen.

Another method of treating whooping cough involved securing as many cockroaches as there are children affected, and naming one after each child. Then each child placed a roach into a bottle which was then tightly corked. The sickness is believed to pass with the death of the insect. During this period it is necessary, however, to keep the child's bowels open, else the charm may react and kill him.

A person living in the city is advised to put a cockroach in a thimble, tie it up in a cloth, and wear it around the neck. "You will never whoop after wearing it."

For chicken pox, the child affected is placed before the open door of a chicken house so that the chickens in coming out fly over him.

To cure lameness, an earthworm is placed in a bottle, which is then hung up somewhere. After the worm decays, the residue is rubbed on the affected part.

Pellets of yellow pine (*Pinus echinata*) tar are considered beneficial for soreness of the back, and as a cathartic.

For rheumatism, an eelskin is bound around the part affected. Similarly, to ease a backache, the skin of a blacksnake, removed entire from the living reptile, is worn around the waist (one old Nanticoke is said to have obtained a fresh skin every spring, which he wore constantly).

In another treatment of rheumatism, the person is taken to the sea-shore and at the water's edge buried nude in the sand with only his head exposed. He remains there for about an hour. Two Nanticoke men are known to have been cured in this way.

To cure infants of colds, tea is made from calamus or "muskrat" root (*Acorus Calamus*) and administered. A tea brewed from "Horse mint" (*Monarda punctata*) or skunk cabbage (*Symplocarpus foetidus*) leaves is also good for colds. The Nanticoke believe that "chills" can be "promised away" by a healer or witch.

In another treatment of chills, notches equal to the number of attacks are cut in a stick. The person then goes to a stream flowing east throughout its course, throws the stick over his left shoulder into the water, and walks away. He will have relief within a day or two.

If a child suffers from croup, he is stood against a door-joint and his height marked. After he outgrows the mark, the croup will leave him.

A remedy for sore throat is to place the bent thumb inside the sick person's mouth so as to force his jaws far apart for a period of five minutes.

A syrup made from star-grass is good for a cough.

Pipsissewa (*Chimaphila umbellata*) is steeped and drunk plentifully for the ague.

To prevent fever in summer, the petals of the first hepatica flower encountered that spring are chewed. This plant (*Hepatica americana*) is called "chills and fever."

Mullein (*Verbascum Thapsus*) leaves are applied to allay fever. To prepare them the leaves are spread out, dipped in vinegar, and then bound about the forehead, wrists, back of the neck, and soles of the feet. For a time the leaves are kept moist with vinegar.

Wild thyme (*Thymus Serpyllum*) and boneset (*Eupatorium perfoliatum*) are steeped together and taken for chills and fever.

Fever and ague, very common in this region, are believed due to going barefoot or swimming in the river too early in spring. These ailments are warded off in the spring by drinking "sarsafack" or sassafras (*Sassafras albidum*) tea, which is "cooling to the blood."

For pains in the stomach a cup of water into which tobacco smoke has been blown is drunk. Tobacco smoke is blown into a child's mouth to cure colic. To treat indigestion, the gizzard of a chicken, previously kept from eating filth, is eaten without being cleaned.

A necklace made from kernals of a red ear of corn is worn as a protection against nose-bleed. Another method is to wrap a dried spider in cloth and place it in a thimble to be suspended from the neck. Other treatments include pushing a cobweb up one's nostrils or dropping a bunch of brass keys down one's back.

It is also believed that recital of the following Biblical verse (Ezekiel 16:6) will cure nose-bleed, but only for a person of the opposite sex. "When I passed by thee, I saw thee polluted in thy blood, and I said unto thee, Live: and thou didst live in thy blood: yea, thou didst live in thine blood."

A good lotion for sprains is made of the root of the false indigo (*Baptisia tinctoria*) plant and aspen (*Populus deltoides*) bark. Also beneficial in this connection are the macerated roots of devil's shoe-string (*Yucca filamentosa*) made into a poultice.

Warts, it is believed, can be "charmed away" with the spittle of certain persons with such power. Another treatment is that of rubbing them with prickly pear (*Opuntia vulgaris*). A split joint of the same plant is also applied to relieve inflammation from insect stings or bites.

Another way of removing warts is to rub them with a stone found at a crossroad, as one walks along. Then the stone is thrown over the left shoulder and the person continues on to his destination. The wart will disappear in a few days.

To relieve frost bite, the bladder of some animal is bound over the affected part. Gall from an animal source is also considered beneficial.

Shingles are cured by rubbing grease from a black hen or the tail of a black cat upon the sides of one's body.

The leaves of burdock (*Arctium minus*) are steeped and applied to boils.

Poultices are made of the leaves and stems of a plant called "King Cole oil weed" (*Sp.?*).

To rid oneself of intestinal worms, the leaves of a plant called "fish weed" (*Sp.?*) are chewed. Snake-root (*Aristolochia Serpentaria*) is steeped and drunk for the same purpose.

The Jewel weed plant or "balsam" (*Impatiens biflora*) is steeped and used to make a poultice for burns.

Skin cuts are healed by covering them with cobweb and binding a silver dollar over the wound. Soot from the chimney is also useful for this purpose.

To relieve earache, tobacco smoke is blown into the ear.

"Cow-itch," which generally affects people in the fall, is treated by wearing a piece of red yarn tied around the toe. The whole foot may also be placed in hot cow dung for this skin disorder.

Sores ("dew poison") are believed to come on one's feet from walking barefoot in dewy grass. This trouble is treated by bathing the feet in a liquid steeped from fuzzy, white leaves called "mouse-ears" (*Sp.?*).

"A splinter from a tree struck by lightning will cure toothache." A treatment for aching teeth is to pick up an old jawbone of a horse by the teeth and to walk forward counting each step until the burden must be dropped. The number of steps taken indicates the number of years before the attack will recur. One informant who tried this, counted to 100.

Grease obtained from a black hen is rubbed on the aching gums of teething infants. Another remedy is to roast the brains of a dead rabbit and rub a small amount on the gums. Another informant removes the "knowledge-bone," an odd-shaped bone from a hog's ear, and suspends it by a cord from her child's neck. A mole's foot inclosed in a small bag is also worn for the same purpose. A number of the Nanticoke carry a mole's foot in the pocket as a good luck piece to gain money.

The berries of sand myrtle (*Leiophyllum buxifolium*) are used to make wine, and a spring tonic.

Pennyroyal (*Hedeoma pulegioides*) and tansy (*Tanacetum vulgare*) are both employed as sudorifics. The former is also regarded as an excellent remedy for kidney and liver troubles.

The grated root of the arrow-arum (*Peltandra virginica*) is given with milk to babies.

Several plants have local folk names, although no medicinal efficacy is ascribed to them. Milkweed (*Asclepias syriaca*) is called "frog's milk." Wild gooseberries (*Grossularia* [sp.]) are known as "Devil's berry" because "when they ripen one at a time and fall off during the night, they say that the Devil picks them off."

WEATHER SIGNS

If killdeer plovers (*Charadrius vociferus*) ("kildee") are observed to flock and call on a calm morning, the wind will come up. These birds as well as others, are believed able to say certain words. Thus the killdeer says, "Wind blow, wind blow!"

The flight of wild geese (*Branta canadensis*) is also regarded as a sign of approaching wind.

If chickens continue to feed in the rain, it is an indication that the rain will last for some time. The Nanticoke believe that the fowl, aware of continuing rain, eat before they take shelter. If shelter is sought when the rain begins, the rain will not last long.

If the surf (the ocean is about ten miles from the village) can be heard, one may expect an east wind bringing rain the following day.

Another indication of approaching rain is the flocking together of crows or blackbirds (*Corvus brachyrhynchos*).

If hogs become restless and start to pick up sticks, cobs, etc., as for a bed, the Nanticoke believe that a storm is approaching.

The appearance of the sun during rain denotes rain the following day. When this occurs the Nanticoke say that the Devil is beating his wife. Similarly if the sun appears while it is snowing, the "Old Man" (Devil) is picking his geese.

The point on the horizon where the Milky Way appears to rest indicates the direction from which the wind will blow the next day.

The appearance of a sun dog (parhelion) is an indubitable indication of approaching storm.

If a snake is killed, thrown into the branches of a tree and is caught by them, it will rain the following day. The day will be clear, however, if the dead reptile falls clear.

The crowing of a rooster after nightfall denotes bad weather. Snow is to be expected if wood sputters in the fire.

MISCELLANY

"If you mock a mourning dove (*Zenaidura macroura*), some time he will burn you."

The cooing of the turtle dove indicates the direction in which one's lover is located.

The first cry of the whippoorwill (*Caprimulgus vociferus*) in spring marks the time to plant corn.

A black animal of any kind crossing one's path at the beginning of a venture is a forecast of bad luck. One should turn back and go another time.

A falling star foretells a disappointment.

At the first sight of the new moon, one should remove his pocketbook and shake it towards the moon for good luck.

If the new moon is first seen with one's arms full of objects, times will be difficult during the month. If a person has his arms full of brush on this occasion, he will be carrying brush during most of the month. If his arms are empty, but little work will be done during this period.

The Jack-o'-lantern* is a kind of spirit which pursues people and brings misfortune. If one is seen, the observer turns his pockets inside out to avert the evil. One informant claims to have seen several of such spirits one night issuing from a dead stump.

A ringing noise in the ear is known as "death bells" and announces the demise of a relative or friend.

Nanticoke men visit each others' homes on New Year's Day, the first one to arrive at each house being given fifty cents. For a woman to come to the house on this day is regarded as an ill omen.

Like the stork in Europe, the fish hawk (*Pandion haliaetus carolinensis*) is venerated by the Nanticoke. To kill one or disturb a nest is regarded as a "sin." These birds build their nests near the Indians' homes, generally in the limb of a dead tree in an open field, and return to them year after year.

The turkey vulture, or buzzard (*Cathartes aura septentrionalis*) likewise is never molested.

* Speck (1928: 263): "'Fox fire,' the phosphorescent glow emanating from damp[,] rotten wood [is] . . . one of the most persistent survivals among the feeble remnants of the New England tribes."

If a scorpion lizard (*Sceloporus undulatus*) or "scorpion," as it is known locally, gets on a person and runs completely around his body, it is a sign that the person will die.

To hand a person a closed knife will bring bad luck. The blade should be opened.

After severing the umbilical cord of an infant, it should be disposed of by burning lest misfortune ensue. If the cord is dropped, the baby subsequently will be unable to retain its urine.

If an excess of saliva runs from a baby's mouth, empty a thimblefull of water into the tea kettle when it is nine days old. That will prevent the child from slobbering.

"When we cut our hair, we put it in the stove and burn it. I clean my comb every morning and throw the loose hair in the fire. If it blazes it means a long life, but if the hair burns slowly and chars, they say a person won't live long."

If some of a person's hair is used by birds in nest building, it may result in a loss of mind.

The deciduous teeth of children are thrown in the fire. "If a dog should swallow one, a dog's tooth will grow in the child's mouth."

To shape a baby's head round, press its forehead with the right hand, the back of the head with the left, three times a day for four weeks.

An infant's nose may be shaped by pinching it gently several times a day.

To hear a hen crow is bad luck. The bird should be killed.

If a rooster crows near the door of the house, a visitor is to be expected.

When the cry of the turtledove is heard, one may sit down, take off his shoes, and find inside of one a hair of the same color as that of one's future wife.

The small eggs often laid by chickens are called "latter eggs." They indicate that the hen is through laying for the season.

It is regarded as unlucky to burn sassafras (*Sassafras albidum*) wood in the fire; the crackling sound made by this wood in burning will develop ill temper in some member of the family. There is no aversion to burning grapevine (genus *Vitis*), as among the Pamunkey.

Sweeping out the house after nightfall is regarded as "sweeping out your luck."

"While moving a house, carry a broom and some salt and you'll always be clean and well."

In going out to hunt, the first animal or bird encountered should be killed "even though it's nothing but a sparrow."

Oil is prepared from walnuts, thickened, and used in the preparation of food.

A spider hanging from the ceiling announces the approach of a stranger.

"A boy born to look like his mother is born to fortune; the same is true for a girl who resembles her father."

A crust ("crisp") of soot taken from the chimney is placed in a cloth bag and steeped in a half cup of hot water. This "tea" is considered beneficial for indigestion of babies.

A "mushrind" (mushroom) is believed to grow from frog spawn.

Snails or slugs are never harmed. A slug is believed to be an immature snail, too young to have a shell. "It hunts around to find an empty shell and occupy it."

To bite off the head of a moth or butterfly is to secure a new suit of clothes of the same pattern as the insect's wings.

The eyes of the bullfrog are "popped-out" because he was run over by a "timber cart." Hence the remark, "it is hard on the eyes," made of a youth who refuses to fight.

The affections of a girl can be gained in the following way: An empty bottle is tightly corked and taken to a stream that flows east throughout its entire course. A string is fastened to the bottle and then secured to a tree near the stream. The bottle is placed in the water so that the current will draw the string taut. Then a picture of the loved one is drawn in the sand with a stick, the mind being held intent upon its desire. The arrangement is then left undisturbed. As long as the string holds the bottle, so long will the girl's affections be retained.

A person's death may be brought about by placing a lock of his hair in a hole bored in a pine tree in the winter and plugging it up. Sometime in March the sap will rise in the tree and result in that person's death within a year.

To win the affections of a person of the opposite sex, go to a well at noon on the first day of May and hold a mirror so as to reflect the surface of the water below. The image of the person that the observer is to marry will appear in the mirror. If marriage is not in store for that person, the image of a coffin will appear instead. A variant of this involves gazing down into the water for the image to appear.

Another method of viewing the likeness of one's future husband is

to tie the ends of two balls of yarn together and take them to the upper story of an old, deserted house. Then throw one yarn ball out of the window, retaining the other in the hand, and repeat the following lines:

"I wind my yarn,
Who'll wind agin' me?"

The girl's intended will then pick up the yarn and start to rewind it.

An incident was related by the Nanticoke to illustrate still another means of looking into the future. In employing this device a girl must wash her underclothing and hang them before the fire to dry. During the night her prospective husband will come and turn them to dry on the other side. A girl carried this out and next morning found that her garments had been turned and a knife thrust into them. She kept the knife. Some years later she married and told her husband of finding the knife. His reply was, "Yes, I put that knife there and now I am going to kill you with it. You nearly caused me to lose my life by a fall from the rigging of a ship." It was believed that the man's spirit left his body while he was working aloft on a ship, causing him to fall many feet to the deck and suffer severe injury.

For the following test, the services of two people of the same sex are required (?). An egg is boiled hard and allowed to remain in water for a whole day. The egg is then broken, the yolk removed, and the resulting space filled with salt. The hardened egg white and salt are then eaten without drinking water and without speaking. Then the subject walks backward from the room, goes upstairs backward, and gets into bed in the same way. If he or she dreams that night, the one who brings a drink of water in the dream is the future spouse. During the entire night complete silence must be maintained.

A test of similar purpose is also carried out by two persons of the same sex. At midnight, after the lights are turned very low, the principals sit opposite each other at a table and eat ashcake. The figure of the future wife or husband will appear in the door and walk across the room. If one is to remain single, a coffin will be seen beside one's chair.

One Nanticoke informant recalled an incident of two sisters, each of whom wished to know the identity of her future husband. They undertook such a test as was just described and made the necessary arrangements for the "silent" meal in advance. Upon promising not to converse, their brother was allowed to witness the procedure. The door of the house was opened wide and secured to prevent its closure by the high wind usually arising upon such occasions. The table was set for

two and each girl, in turn, cooked an egg and some meat for her lover, the food being placed on the table. Just then someone drove up outside, a young man walked in and sat down at the place set by one of the girls. Immediately following him were two men bearing a coffin which they placed beside the chair of the second sister. At the sight of this morbid object, both girls screamed, causing their ghostly visitors and the coffin to disappear. Some years later, according to the recital, the first girl married the man revealed to her that night but her less fortunate sister died within a short time. The informant added that while the meal was in progress, the prospective suitor lapsed into a brief coma which permitted his spiritual visitation at the rite.

Dreams and their significance form an interesting topic of conversation in the typical Nanticoke household. One informant stated, "Some are born to see sights. If their veil (caul) is saved, they can talk with the dead; if lost, they will be timed and cannot talk with those in the other world. People who have such power aren't afraid of ghosts."

A number of the Nanticoke rely upon their dreams for advice along various lines. One woman stated that she had been perplexed as to the proper placing of a flight of steps by which to descend to the grove and beach in front of her dwelling. One night she had the following dream:

"I was standing out in front yard astudyin' 'bout where to put me steps. Pretty soon, Ralph (my son who's dead) came right up to where I was standin' and said, 'Mom, what's ye studyin' 'bout?' and I says, 'Tell me where to put me steps.' He said, 'Put 'em right chere.' And so I did."

One night she had a dream in which she talked with a daughter who died some years previously. "I saw Eunice there and she looked natural. I said, 'Don't you want to go home with me?' 'No,' she said, 'I'm happy here and I have lots of time off. Anyway, you'll all be home with me before another year passes. The world hain't goin' to stand long.'"

Suggestive of the veil which separates them from the spiritual realm is a Nanticoke case in which a sister communicates in a dream with her brother whose death occurred some years previously. The scene of the dream was an attic room, a fence separating the two. They could not converse together, but wrote their questions and answers on a sheet of paper which was held up and read by each one in turn.

It is said that in dreams the dead always appear natural and never dressed in "grave clothes."

One man said that his mother seldom had a dream, but when she

did it was usually of importance. On one occasion she dreamed of a wonderful place to catch fish and told her husband about it. Following her instructions he found the spot and caught a great quantity of fish. Another time they lost the smokehouse key. In a dream she saw the place where it was hidden from view in tall grass. Next day she went to the spot and found the key. "Somebody had dashed it in the grass waist-high."

To dream of one's teeth falling out is a forecast of a death in the family.

APPENDIX II

Uses of Medicinal Plants Among the Canadian Delaware

THE following notes on the medicine practices of the Six Nations Delaware, Grand River Reserve, located near Hagersville, in Brant County, Ontario, Canada, were recorded during a visit to the reserve in November, 1931. The group consisted of about 150 individuals of mixed Indian and white blood. Only a few, however, had any knowledge of the language and traditions of the Delaware, who once inhabited the section of the country now known as Pennsylvania, New Jersey, and New York. To find the identity and location of the predecessors of the band now in question, who migrated to Canada, will be impossible until a comparative study has been made of the various vocabularies.

I am indebted to Mrs. Martha Peters Hill, Nicholas Powless, his sister, Mrs. Maracle, Joseph Montour, John Lickers, and Walter Moses for aid in securing the Delaware information herein presented.

In contrast to the ceremonies connected with the various processes of healing as employed by the Oklahoma Delaware, we find only a few traces of such rites among the Delaware of Canada. Plant parts to be used for medicinal purposes should be gathered when the vital properties are in that part of the plant (the flower, root, etc.) to be used. One informant added that plants should be gathered before the fireflies appear. When seeking herbal plants, the first of the desired species should not be plucked. It is customary to pass on to another of the same variety and there dig a small hole beside the plant and in it place an offering of tobacco. If a large quantity of herbs is gathered, it is tied in bundles and allowed to dry in the sun to prevent mould. Some dry their plants in a warm room.

When bark is used it is taken from the east side of a tree; only the inner bark, which is usually peeled downward, is used. Roots may be scraped or cut into small portions.

Medicinal plants are regarded as being sensitive to handling, and when brewing medicine, care must be taken not to stir the mixture while it is steeping. After being thoroughly steeped, the medicine is removed from the fire, and if necessary, stirred only toward the right.

It is never cooled by blowing upon it. Running water should be used; it was customary in former times to dip the water with or against the current, or to submerge the container and allow the water to flow in from all sides.¹

The term "*doctol*," from English doctor, was the only term for an herbalist obtainable from those interviewed. It was also said both men and women could become practitioners. When calling upon a doctor for treatment it is customary to offer him a present of money. In former times, cloth, tobacco, and other gifts were offered.

GREAT MULLEIN (*Verbascum Thapsus*):

The leaves are crushed and applied as a poultice to bruised surfaces to reduce swelling and allay pain.

NANNYBERRY (*Viburnum Lentago*) and mullein leaves are steeped and the tea administered in case of measles.

LIVE-FOREVER (*Sedum telephioides*):

The leaves are crushed and used as a poultice to draw out poison. My informant regarded this to be a most powerful and effective application. He stated that he had suffered from a serious case of infection which resulted from stepping on a rusty nail and that the above remedy cured him in a short while.

PLANTAIN (*Plantago major*):

The leaves are crushed and applied to bruises.

BURDOCK (*Arctium minus*):

The leaves are bound on the body to reduce pain. The root is used in making medicine for purifying the blood.

HORSERADISH (*Radicula Armoracia*):

The leaves are applied as a poultice in case of neuralgia.

BITTERSWEET (*Celastrus scandens*):

The root is used for making medicine which is administered to persons suffering from consumption.

TANSY (*Tanacetum vulgare*):

The plant is used in making medicine which is effective in treating disorders of the stomach.

¹ My informants could not explain this, but said that the water must be dipped in different ways according to the nature of the disease to be treated. It is a common belief that water dipped *with* the current acts as a laxative and *against* it acts as an emetic. Allowing the water to flow into the container from all sides suggests the idea that the remedy to be made would tend to benefit the entire system.

BONESET (*Eupatorium perfoliatum*):

This is considered to be a very powerful medicinal herb by my informants, and it should be used with great precaution, according to their belief. Tea made from the leaves is beneficial as a stomach medicine.²



Painting by Georgetta Brickner

Boneset

Eupatorium perfoliatum

ELECAMPANE (*Inula Helenium*) root and poplar (*Populus tremuloides*) bark are steeped together and the liquid drunk to relieve a cold.

CATNIP (*Nepeta cataria*):

A tea made from the leaves is regarded as a soothing drink for infants.

² This plant so commonly used by both Indians and whites in those sections of eastern North America where it is indigenous, appears to be regarded as being too powerful to be tampered with by the Six Nations Delaware informants. The Oklahoma Delaware, however, use the plant freely.

WHITE PINE (*Pinus Strobus*):

The twigs are steeped to make a medicine which is effective in treating disorders of the kidneys. It is also administered to persons suffering from pulmonary diseases.

The pitch is applied to boils to draw out the poison and reduce the pain.

SWEET FLAG (*Acorus Calamus*):

The root is scraped and hot water poured over it and drunk in case of colds.

BLOODROOT (*Sanguinaria canadensis*):

A small quantity of the powdered root is added to a half a cup of lukewarm water and a teaspoonful administered to stop vomiting. The root is also used in combination with other plants in making a blood purifier.

YELLOW OAK (*Quercus Muehlenbergii*):

To stop vomiting, pour water over a piece of the bark, and when the water becomes a yellowish tinge drink a small quantity of it.

IRONWOOD OR AMERICAN HORNBEAM (*Carpinus caroliniana*) root or bark, and the bark of juniper (*Juniperus communis*), white oak (*Quercus alba*), wild cherry (*Prunus serotina*), and hickory (*Carya ovata*) are steeped together for a tonic. A small bundle of some of each is put into about a pint of water. The mixture is steeped down to about half the quantity. An equal part of brandy may be added. This is considered to be a month's treatment for one person and is considered to be effective in treating cases of general debility. It is valuable as a remedy for diseases peculiar to women.

My informant (Nicholas Powless) stated that he had bought the remedy, as is customary, from a Delaware herbalist. After a prolonged illness, during which time he was in the hospital, Mr. Powless was brought home, as he said, apparently to die. He obtained the formula just noted, made up the medicine, and is taking it daily. He claims that he has continued to regain his strength and is slowly recovering from a complication of diseases pronounced incurable.

A tea made by pouring hot water over a small quantity of soot is given to babies in case of colic. A stronger tea is beneficial for a sick cow.

A powder obtained from decayed pine (*Pinus Strobus*) is used for babies because of its healing properties.

SUMAC (*Rhus typhina*):

A tea made from the berries is drunk as a remedy for diarrhea.

Skunk oil and molasses is taken for colds and cramp. The oil rubbed on the throat and chest sparingly tends to relieve congestion. Goose and raccoon oil are used similarly.

Rattlesnake oil is valuable in treating stiff joints. It is very powerful and should be used sparingly, only a few drops on the finger tips to be applied to the affected parts. The skin may be bound on the wrists and ankles to strengthen them.³

³ When told of the belief that snake oil, if used alone, "will unjoint you," an idea common among the Wampanoag of Cape Cod, Massachusetts, my informant laughed and said that he knew that it would not because he had used it on his joints with good results. His sister added that if he could obtain some rattlesnake oil now, he might keep in better condition.

APPENDIX III

Three Oklahoma Delaware Myths

THE BOY WHO LIVED WITH A BEAR

“ONCE a small boy was lost in the woods. A woman with two children came along and took him with her to her house in the woods. But the boy soon discovered that this friend was a bear with two cubs and that the house was a great hollow tree trunk. One day a young hunter was out in the woods and he saw the little boy in a tree with the two cubs so he went back and told his people. The mother bear knew that soon they would come to take the boy away from her and she felt very badly because she had grown to like him as her own. And she knew, too, that when they came for the boy she would probably lose her life. So she cried and begged him to take his little bow and arrow and hold them near the entrance of the den so that the hunters might know that he was in there, but the boy would not do as she bid. Finally, the hunters came and called the boy, but he would not come out. The bear came out and the hunters killed her and took the boy and two cubs. The boy was returned to his family, but living in a house was strange to him after living with the bears in their den, and he had queer ways. The cubs were raised until they were full-grown and then they were released by performing a ceremony with wampum, which is always done when pets are to be no longer kept by a family.” (See pp. 42 and 43)

THE WOODS DWARF

“*Maté-kanis*, ‘woods dwarf,’ lived in the forest. He was kind and was always helping people, but only a few were known to have seen him. He was discovered by a little boy who went to play alone in the woods one day. The little boy liked *Maté-kanis* so much that he went to play with him often. When the other children asked him where he had been he would say, ‘I have been to play with my little friend who lives in the woods.’ Sometimes he could see *Maté-kanis* near where the other children were playing and would point to him, but his playmates could not see the little brown creature. He is said to look like a small boy but is strong and powerful. Only certain people were known to have seen *Maté-kanis* and they usually became noted for their physical

strength. *Maté-kanis* is not seen any more because the Indians have changed their mode of living, and are not clean enough to be visited by such spiritual beings. The white man's ways are so far removed from the ways of the Indian that if we adopt any of them we cannot expect to see many of the things which were commonly seen before we knew of his strange ways."

THE SEVEN WISE MEN

"Years ago there were seven wise men among the Indians. So great was their pride that they did not wish to associate with the common people. Because they were so wise and great, they had to find a way to conceal themselves from the people. After thinking over the matter very seriously they said, 'We will turn into rocks of odd shapes.' Now there happened to be a young man who was gifted¹ and he went out to walk on a hillside. As he walked along he noticed the seven peculiarly shaped rocks and as he stopped to look at them, one of them spoke to him. The young man recognized them at once as being the seven prophets and they conversed together. They told him not to tell where they were, but someone noticed his frequent visits to the spot, and soon they were again sought by curious people. Now they must leave the quiet hillside and go elsewhere. After a while there appeared in the forest seven stately cedar trees. More perfectly formed trees were never before seen and they were greatly admired. It was not long before someone discovered that they were the seven prophets and they again had to change their form and depart. The Creator thought that it was of no use to place them on earth, as they were being constantly bothered by earthly things, so he placed them in the heavens. There we see the seven stars² as they were placed there so long ago by the Creator."

¹ According to *Wi-tapanóxwe* every individual is "gifted" or has some supernatural power. In some it is developed early in life, while in other individuals it remains a latent undeveloped force.

² The Pleiades.

PLANTS AND PLANT USES OF

BOTANICAL NAME	COMMON NAME
1. <i>Achillea Millefolium</i>	Yarrow
2. <i>Acorus Calamus</i>	Sweet Flag
3. <i>Aesculus glabra</i>	Buckeye
4. <i>Agaricus campestris</i>	Mushroom
5. <i>Allium canadense</i>	Wild Onion (small)
6. <i>Amaranthus retroflexus</i>	Pigweed
7. <i>Ambrosia artemisiifolia</i>	Ragweed
8. <i>Anaphalis margaritacea</i>	Pearly Everlasting
9. <i>Angelica atropurpurea</i>	Angelica
10. <i>Apios tuberosa</i>	Indian Potato, Groundnut
11. <i>Apocynum cannabinum</i>	Indian Hemp
12. <i>Aralia nudicaulis</i>	Sarsaparilla
13. <i>Arctium minus</i>	Burdock
14. <i>Aristolochia Serpentaria</i>	Virginia Snakeroot
15. <i>Artemisia frigida</i>	Wild Sage
16. <i>Asclepias</i> (5 species)	Milkweed
17. <i>Asclepias tuberosa</i>	Butterfly Weed
18. <i>Baptisia tinctoria</i>	False Indigo
19. <i>Betula lutea</i>	Yellow Birch
20. <i>Brassica nigra</i>	Black Mustard
21. <i>Brauneria purpurea</i>	Purple Cone-flower, "Horse-hobble weed"
22. <i>Carya cordiformis</i>	Bitternut Hickory
23. <i>Carya glabra</i>	Pignut
24. <i>Carya ovata</i>	Shell Bark Hickory
25. <i>Castanea pumila</i>	Chinquapin
26. <i>Cercis canadensis</i>	Redbud
27. <i>Chimaphila umbellata</i>	Pipsissewa
28. <i>Chrysopsis mariana</i>	Golden Aster
29. <i>Cimicifuga racemosa</i>	Black Snakeroot
30. <i>Cirsium lanceolatum</i>	Bull Thistle
31. <i>Cornus canadensis</i>	Bunchberry
32. <i>Cornus florida</i>	Dogwood
33. <i>Corylus americana</i>	Hazlenut
34. <i>Crotalaria sagittalis</i>	Rattle Box
35. <i>Datura Stramonium</i>	Jimson Weed

THE OKLAHOMA DELAWARE

NATIVE USE	PART OF PLANT USED	TYPE OF MEDICINE
Medicine (liver and kidneys)	Entire plant	Simple
Medicine (cold, stomach-ache, suppressed menses)	Root	Compound
Medicine (poultice; utility fish poison)	Nut pulverized	Simple
Food		
Food		
Food	Use with others as greens	
Medicine (blood poisoning preventive)	Entire plant as poultice	Simple
Medicine (tonic)	Root	Compound
Medicine (stomach)	Root	Simple
Food	Root	
Mats		
Medicine (tonic)	Root	Compound
Medicine (rheumatism)	Root	Simple
Medicine (tonic)	Root	Compound
Medicine (ceremonial)	Leaves chewed	
Medicine (epilepsy)	Root	Compound
Medicine (rheumatism; healing drink following childbirth)	Root	Simple and compound
Medicine (wash for cuts, ulcers)	Root	Simple
Medicine (cathartic)	Bark	Simple
Food	Young shoots	
Medicine (venereal disease)	Root	Simple and compound
Food	Nuts	
Food	Nuts	
Food	Nuts	
Food	Nuts	
Medicine (reduce fever, stop vomiting)	Bark	Simple
Medicine (bladder, blood purifier)	Plant	Compound
Medicine (infants, frail children)	Root	Simple
Medicine (tonic)	Root	Simple and compound
Medicine (rheumatism)	Root	Simple
Medicine (body pains)	Bark	Compound
Medicine (tonic)	Root	Compound
Food	Nuts	
Medicine (venereal disease)	Root	Simple
Medicine (poultice for cuts)	Leaves, seeds	Simple

PLANTS AND PLANT USES OF

BOTANICAL NAME	COMMON NAME
36. <i>Daucus Carota</i>	Wild Carrot
37. <i>Dentaria diphylla</i>	Toothwort
38. <i>Diospyros virginiana</i>	Persimmon
39. <i>Epipactis pubescens</i>	Rattlesnake Plantain
40. <i>Eryngium aquaticum</i>	Button Snakeroot
41. <i>Eupatorium perfoliatum</i>	Boneset
42. <i>Fragaria virginiana</i>	Strawberry
43. <i>Fraxinus americana</i>	White Ash
44. <i>Gaultheria procumbens</i>	Wintergreen
45. <i>Gaylussacia baccata</i>	Huckleberry
46. <i>Gelsemium sempervirens</i>	Yellow Jasmine
47. <i>Gentiana crinita</i>	Fringed Gentian
48. <i>Gleditsia triacanthos</i>	Honey Locust
49. <i>Hedeoma pulegioides</i>	False Pennyroyal
50. <i>Helianthemum canadense</i>	"Frost" or "ice" weed
51. <i>Humulus Lupulus</i>	Hops
52. <i>Hydrangea arborescens</i>	Sevenbark
53. <i>Ilex opaca</i>	Holly
54. <i>Inula helenium</i>	Elecampane
55. <i>Iris versicolor</i>	Blue Flag
56. <i>Juglans nigra</i>	Black Walnut
57. <i>Juniperus virginiana</i>	Red Cedar
58. <i>Leonurus Cardiac</i>	Motherwort
59. <i>Lobelia cardinalis</i>	Cardinal Flower
60. <i>Lophophora williamsii</i>	Peyote
61. <i>Mentha canadensis</i>	Wildmint
62. <i>Mentha piperita</i>	Peppermint
63. <i>Mitchella repens</i>	Partridge Berry
64. <i>Monarda punctata</i>	Horse Mint
65. <i>Morus nigra</i>	Mulberry
66. <i>Myrica sp.</i>	Bayberry
67. <i>Myrica asplenifolia</i>	Sweet Fern
68. <i>Nepeta cataria</i>	Catnip
69. <i>Opuntia vulgaris</i>	Prickly Pear
70. <i>Panax quinquefolius</i>	Ginseng

OKLAHOMA DELAWARE—Continued

NATIVE USE	PART OF PLANT USED	TYPE OF MEDICINE
Medicine (diabetes)	Blossoms	Simple
Medicine (scrofula, venereal disease)	Root	Compound
Food	Fruit	
Medicine (poultice; female disorder)	Leaves	Simple and compound
Medicine (venereal disease)	Root	Compound and simple
Medicine (chills, fever)	Root	Simple
Food	Berries	
Medicine (cathartic)	Bark	Simple
Medicine (tonic)	Plant	Compound and simple
Food	Berries	
Medicine (salve)	Root	Compound
Medicine (stomach; blood purifier)	Root	Simple
Medicine (tonic)	Bark	Compound
Medicine (pain in stomach)	Leaves	Simple
Medicine (strengthening)	Plant	Simple
Medicine (nerves)	Blossoms	Simple
Medicine (gallstones)	Root	Compound
Medicine (tonic)	Root	Compound
Medicine (rheumatism; liver, kidneys)	Root	Compound
Medicine (cathartic)	Bark	Simple
Medicine (rheumatism)	Twigs	Simple
Medicine (female disorder)	Leaves	Simple
Medicine (typhoid)	Root	Simple
Medicine (consumption; periodic fits; emergency med. charm)	"Bean" or "Button"	Simple
Medicine (tonic)	Leaves	Compound
Medicine (suppressed menses)	Plant	Simple
Medicine (fever)	Plant	Simple
Medicine (cathartic)	Bark	Simple
Medicine (female generative organs)	Root	Compound
Medicine (poison ivy)	Leaves	Simple
Medicine (tonic for children)	Leaves with peach seed	
Not used		
Medicine (effective in any severe illness. Most potent med.)	Root	Simple and compound

PLANTS AND PLANT USES OF

BOTANICAL NAME	COMMON NAME
71. <i>Phytolacca americana</i>	Poke
72. <i>Pimpinella Anisum</i>	Anise
73. <i>Plantago major</i>	Plantain
74. <i>Platanus occidentalis</i>	Plane Tree
75. <i>Podophyllum peltatum</i>	May Apple
76. <i>Populus sargentii</i>	Cottonwood
77. <i>Prunella vulgaris</i>	Heal-all
78. <i>Prunus americana</i>	Plum
79. <i>Prunus Persica</i>	Peach
80. <i>Prunus serotina</i>	Wild Cherry
81. <i>Pyrus communis</i>	Pear
82. <i>Pyrus coronaria</i>	Crab Apple
83. <i>Pyrus Malus</i>	Apple
84. <i>Quercus alba</i>	White Oak
85. <i>Quercus macrocarpa</i>	Bur Oak
86. <i>Quercus palustris</i>	Pin Oak
87. <i>Quercus rubra</i>	Red Oak
88. <i>Quercus velutina</i>	Black Oak
89. <i>Radicula Nasturtium-aquaticum</i>	Water Cress
90. <i>Rhamnus caroliniana</i>	Buckthorn
91. <i>Rhus copallina</i>	Dwarf Sumac
92. <i>Rhus Toxicodendron</i>	Poison Ivy
93. <i>Rhus typhina</i>	Staghorn Sumac
94. <i>Ribes rotundifolium</i>	Gooseberry
95. <i>Ribes triste</i>	Swamp Currant
96. <i>Rubus canadensis</i>	Thimble Berry
97. <i>Rubus nigrobaccus</i>	Blackberry
98. <i>Rubus villosus</i>	Blackberry
99. <i>Rubus occidentalis</i>	Black Raspberry
100. <i>Rumex Acetosella</i>	Sheep Sorrel
101. <i>Rumex crispus</i>	Dock
102. <i>Rumex obtusifolius</i>	Dock
103. <i>Salix humilis</i>	Prairie Willow
104. <i>Salix tristis</i>	Sage Willow, "Red Root"
105. <i>Sambucus canadensis</i>	Elder

OKLAHOMA DELAWARE—Continued

NATIVE USE	PART OF PLANT USED	TYPE OF MEDICINE
Medicine (rheumatism)	Root	Simple and compound
Medicine (cathartic)	Root	Simple and compound
Medicine (poultice; also female disorder)	Leaves	Simple and compound
Medicine (colds, sore throat)	Bark	Compound
Medicine (laxative; love charm)	Root	Simple
Medicine (female disorder)	Bark	Compound and simple
Medicine (fever)	Top	
Food	Fruit	
Food	Fruit	
Medicine (tonic)	Bark, Fruit	Compound
Food	Fruit	
Food	Fruit	
Food	Fruit	
Medicine (antiseptic)	Bark	Compound
Food	Nuts	
Medicine (intestinal pains)	Bark	Simple
Medicine (hoarseness)	Bark	Compound
Medicine (hoarseness)	Bark	Simple
Root	Plant	
Medicine (cathartic)	Bark	Simple
Medicine (ceremonial tobacco mixture)	Leaves, Root	Simple
Medicine (salve)	Root	Compound
Medicine (venereal disease)	Root	Compound
Food	Berries	
Food	Berries	
Medicine (dysentery)	Vine, Berries	Compound
Berries used as food	Berries	
Food	Berries	
Food	Berries	
Food	Plant	
Food	Plant	Simple and compound
Medicine (food)	Root, Young Shoots	
Medicine (venereal disease)	Root	Compound
Medicine (womb displacement; venereal disease)	Root	Compound
Medicine (salve) (fruit edible)	Bark, Berries	Simple

PLANTS AND PLANT USES OF

BOTANICAL NAME	COMMON NAME
106. <i>Sanguinaria canadensis</i>	Bloodroot
107. <i>Sassafras albidum</i>	Sassafras
108. <i>Scutellaria galericulata</i>	Skull Cap
109. <i>Smilacina racemosa</i>	False Spikenard
110. <i>Smilacina stellata</i>	False Solomon's Seal
111. <i>Solanum Dulcamara</i>	Bittersweet
112. <i>Solanum nigrum</i>	Common Nightshade
113. <i>Solidago juncea</i>	Goldenrod
114. <i>Symplocarpus foetidus</i>	Skunk Cabbage
115. <i>Stachys palustris</i>	Hedge Nettle
116. <i>Taraxacum officinale</i>	Dandelion
117. <i>Tsuga canadensis</i>	Hemlock
118. <i>Typha latifolia</i>	Cat-tail
119. <i>Ulmus americana</i>	American Elm
120. <i>Vaccinium pensylvanicum</i>	Lowbush Blueberry
121. <i>Vaccinium corymbosum</i>	Highbush Blueberry
122. <i>Verbascum Thapsus</i>	Great Mullein
123. <i>Verbena hastata</i>	Blue Vervain
124. <i>Viburnum prunifolium</i>	Black Haw
125. <i>Vitis</i> (various sp.)	Wild Grape
126. <i>Vitis rupestris</i>	Wild Grape
127. <i>Vitis vulpina</i>	Wild Grape
128. <i>Xanthoxylum americanum</i>	Prickly Ash
129. <i>Zea Mays</i>	Corn
130. <i>Zea Mays amylacea</i>	Flour Corn
131. <i>Zea Mays everta</i>	Popcorn
132. <i>Zea Mays identata</i>	Dent Corn
133. <i>Zea Mays indurata</i>	Flint Corn
134. <i>Zea Mays saccharata</i>	Sweetcorn

OKLAHOMA DELAWARE—Concluded

NATIVE USE	PART OF PLANT USED	TYPE OF MEDICINE
Medicine (tonic) , ceremonial paint	Root	Simple and compound
Medicine (tonic)	Bark	Compound
Medicine (laxative)	Top	Simple
Medicine (tonic)	Root	Compound
Medicine (venereal disease, scrofula)	Root	Compound and simple
Medicine (fever, also in salve)	Root	Compound
Medicine (venereal disease)	Root	Compound
Medicine (diarrhea, fever)	Leaves (tea or chewed)	Simple
Medicine (whopping cough, fits; poultice)	Root, Leaves	Simple
Medicine (venereal disease)	Root	Compound
Medicine (tonic, laxative, food)	Root, Plant	Compound and simple
Medicine (herbal steam)	Twigs	Simple
Medicine (gravel in kidneys)	Root	Simple
Medicine (coughs, colds)	Bark	Simple
Food	Berries	
Food	Berries	
Medicine (rheumatism, colds)	Leaves	
Medicine (chills)	Root	Compound
Medicine (female generative organs)	Root	Compound
Food	Fruit	
Medicine (increase fertility)	Vine	Compound
Medicine (leucorrhea)	Juice from vine	Simple
Medicine (tonic, heart)	Bark	Simple and compound
Food		
Food		
Food		
Food		
Food		
Food		

PLANTS AND PLANT USES OF THE DELAWARE

BOTANICAL NAME	COMMON NAME
1. <i>Acorus Calamus</i>	Sweet Flag
2. <i>Arctium minus</i>	Burdock
3. <i>Carya alba</i>	Hickory
4. <i>Celastrus scandens</i>	Climbing Bittersweet
5. <i>Eupatorium perfoliatum</i>	Boneset
6. <i>Inula Helenium</i>	Elecampane
7. <i>Juniperus communis</i>	Juniper
8. <i>Nepeta cataria</i>	Catnip
9. <i>Ostrya virginiana</i>	Hop Hornbeam
10. <i>Pinus Strobus</i>	White Pine
11. <i>Plantago major</i>	Plantain
12. <i>Populus tremuloides</i>	Aspen
13. <i>Prunus serotina</i>	Wild Cherry
14. <i>Quercus alba</i>	White Oak
15. <i>Quercus Muehlenbergii</i>	Yellow Oak
16. <i>Rhus typhina</i>	Staghorn Sumac
17. <i>Rorippa Armoracia</i>	Horseradish
18. <i>Sanguinaria canadensis</i>	Bloodroot
19. <i>Tanacetum vulgare</i>	Tansy
20. <i>Verbascum Thapsus</i>	Great Mullein
21. <i>Viburnum Lentago</i>	Nanny-berry

MUNSEE, SIX NATIONS RESERVE, ONTARIO

NATIVE USE	PART OF PLANT USED	TYPE OF MEDICINE
Medicine (colds)	Root scraped	
Medicine (blood purifier, poultice)	Root, Leaves	
Medicine (tonic, general debility, female disorder)	Bark	Compound
Medicine (consumption)	Root	
Medicine (stomach)	Leaves	
Medicine (colds)	Bark	Compound
Medicine (tonic, female weakness)	Bark	Compound
Medicine (infants)	Leaves	Simple
Medicine (tonic, general debility, female weakness)	Root	Compound
Medicine (kidneys, pulmonary boils)	Twigs, pitch	Simple
Medicine (bruises)	Leaves as poultice	Simple
Medicine (colds)	Bark	Compound
Medicine (tonic)	Bark	Compound
Medicine (tonic)	Bark	Compound
Medicine (to stop vomiting)	Bark, pour water in	Simple
Medicine (diarrhea)	Berries	
Medicine (neuralgia)	Leaves	
Medicine (to stop vomiting)	Root powdered	Compound and simple
Medicine (stomach)	Plant	
Medicine (pain, swelling)	Leaves as poultice	Simple
Medicine (measles)	Leaves	Simple

PLANTS USED BY THE NANTICOKE OF

BOTANICAL NAME	COMMON NAME
1. <i>Acorus Calamus</i>	Sweet Flag, "Muskrat-root"
2. <i>Arctium minus</i>	Burdock
3. <i>Aristolochia serpentaria</i>	Virginia Snakeroot
4. <i>Baptisia tinctoria</i>	False Indigo
5. <i>Chimaphila maculata</i>	Pipsissewa
6. <i>Eupatorium perfoliatum</i>	Boneset
7. <i>Hedeoma pulegioides</i>	False Pennyroyal
8. <i>Hepatica americana</i>	Hepatica
9. <i>Impatiens biflora</i>	Jewel-weed
10. <i>Leiophyllum buxifolium</i>	Sand Myrtle
11. <i>Monarda punctata</i>	Horsemint
12. <i>Opuntia vulgaris</i>	Prickly Pear
13. <i>Peltandra virginica</i>	Arrowroot
14. <i>Pinus echinata</i>	Yellow Pine
15. <i>Populus deltoides</i>	Poplar
16. <i>Symplocarpus foetidus</i>	Skunk Cabbage
17. <i>Tanacetum vulgare</i>	Tansy
18. <i>Thymus Serpyllum</i>	Wild Thyme
19. <i>Verbascum Thapsus</i>	Great Mullein
*20. <i>Sassafras sassafras</i>	Sassafras
*21. <i>Asclepias tuberosa</i>	Milkweed, "Frog's milk"
*22. <i>Grossularia</i> (sp.)	Wild Gooseberry, "Devil's-berry"
*23. Sp. ?	"Fish Weed"
*24. Sp. ?	"King Cole Oil Weed"

* Reproduced from Speck 1915: 32.

INDIAN RIVER, SUSSEX CO., DELAWARE

USE	PART USED
Medicine (colic)	Root
Medicine (boils)	Leaves
Medicine (vermifuge)	Root
Medicine (sprains)	Plant
Medicine (ague)	Plant
Medicine (chills and fever)	Plant
Medicine (sudorific)	Plant
Medicine (chills)	First petals chewed to prevent chills
Medicine (burns)	Plant steeped for tea; leaves used as poultice
Medicine (tonic)	Berries
Medicine (colds)	Plant
Medicine (warts)	Rub pear juice on wart
Fed to babies	Root grated
Medicine (cathartic)	Pellets of pine pitch
Medicine (sprains)	Bark
Medicine (colds)	Leaves
Medicine (sudorific)	Plant
Medicine (chills, fever)	Plant
Medicine (poultice for fever)	Leaves dipped in vinegar and bound on back of neck, forehead, wrists, and soles of feet
Medicine (fever, ague)	Roots
None	None
Food	Berries
Medicine (vermifuge)	Leaves chewed
Poultices	Leaves and stems

PLANTS AND PLANT USES OF

BOTANICAL NAME	COMMON NAME
1. <i>Acer saccharum</i>	Sugar Maple
2. <i>Achillea Millefolium</i>	Yarrow
3. <i>Acorus Calamus</i>	Sweet Flag, "Muskrat Root"
4. <i>Alnus incana</i>	Speckled alder
5. <i>Anaphalis margaritacea</i>	Pearly Everlasting, "Indian Posy"
6. <i>Anthemis Cotula</i>	Chamomile, "May weed"
7. <i>Apios tuberosa</i>	Groundnut, "Indian Potato"
8. <i>Amaranthus retroflexus</i>	Pigweed
9. <i>Aralia nudicaulis</i>	Sarsaparilla
10. <i>Arctium minus</i>	Burdock
11. <i>Arisaema triphyllum</i>	Jack-in-the-pulpit
12. <i>Aristolochia Serpentaria</i>	Snakeroot
13. <i>Artemisia absinthium</i>	Wormwood
14. <i>Asclepias syriaca</i>	Milkweed
15. <i>Asclepias tuberosa</i>	Pleurisy root, "Butterfly weed"
16. <i>Aster umbellatus</i>	"Indian Tea"
17. <i>Baptisia tinctoria</i>	Wild Indigo
18. <i>Berberis vulgaris</i>	Barberry
19. <i>Benzoin</i> (sp.?)	Spicewood
20. <i>Betula lenta</i>	Black Birch
21. <i>Brassica nigra</i>	Mustard
22. <i>Bursa bursa pastoris</i>	Pepper grass
23. <i>Caltha palustris</i>	Cowslip, Marsh Marigold
24. <i>Castanea dentata</i>	American Chestnut
25. <i>Caulophyllum thalictroides</i>	Blue cohosh
26. <i>Chenopodium album</i>	Lambsquarters
27. <i>Chimaphila umbellata</i>	Pipsissewa
28. <i>Cirsium arvense</i>	Thistle
29. <i>Coptis trifolia</i>	Golden thread
30. <i>Chrysanthemum</i> <i>Leucanthemum</i>	White Daisy
31. <i>Crotalaria sagittalis</i>	Rattle box
32. <i>Datura Stramonium</i>	"Jimson weed," Jamestown weed

THE MOHEGAN OF CONNECTICUT

NATIVE USE	PART OF PLANT USED	TYPE OF MEDICINE
Medicine (kidney, liver)	Leaves	Simple Simple and Compound
Medicine (colds, rheumatism; stomach)	Root in small pieces	
Medicine (bruises, pain)	Twigs	Simple
Medicine (colds)	Leaves	Simple
Medicine (fever)	Leaves	Simple
Food	Root	
Medicine (hoarseness)	Leaves	Simple
Food (greens)		
Medicine (tonic)	Root	Compound and Simple
Medicine (poultice)	Leaves	Simple
Medicine (liniment, gargle)	Root	Simple
Medicine (snake bite)	Root	Simple
Medicine (vermifuge)	Leaves	Simple
Food	Young shoots	
Medicine	Root	Simple
Medicine	Leaves	Simple
Beverage		
Medicine (cuts, bruises)	Root	Simple
Medicine (fever, sore throat)	Berries	Simple
Medicine (vermifuge)	Leaves	Simple
Medicine (tonic)	Bark	Compound
Medicine (poultice)	Leaves	Simple
Food	Young shoots	Compound
Medicine (vermifuge)	Seed pods	Simple
Food	Plant	Simple
Medicine (colds, whooping cough, rheumatism)	Leaves	Simple
Food	Nuts	
Medicine (kidney)	Root	Simple
Food	Plant	
Medicine (blisters)	Leaves	Simple
Medicine (lungs)	Plant	Simple
Medicine (infant's sore mouth)	Leaves	Simple
Medicine (tonic)	Flowers	
Medicine (blood)	Root	Simple
Medicine (poultice; cuts)	Leaves	Simple

PLANT AND PLANT USES OF

BOTANICAL NAME	COMMON NAME
33. <i>Daucus Carota</i>	Wild carrot, Queen Anne's Lace
37. <i>Echium vulgare</i>	Blue weed
34. <i>Epipactis pubescens</i>	Rattlesnake Plantain
35. <i>Eupatorium perfoliatum</i>	Boneset
36. <i>Euonymus atropurpureus</i>	Fire bush ("wa hoo")
38. <i>Fragaria virginiana</i>	Strawberry
39. <i>Gaultheria procumbens</i>	Wintergreen
40. <i>Gaylussacia baccata</i>	Huckleberry
41. <i>Hamamelis virginiana</i>	Witch hazel
42. <i>Hedeoma pulegioides</i>	Pennyroyal
43. <i>Humulus Lupulus</i>	Hops
44. <i>Impatiens biflora</i>	Balsam
45. <i>Inula Helenium</i>	Elecampane
46. <i>Iris versicolor</i>	Blue flag
47. <i>Leonurus Cardiac</i>	Motherwort
48. <i>Mentha canadensis</i>	Wild mint
49. <i>Mentha piperita</i>	Peppermint
50. <i>Mentha spicata</i>	Spearmint
51. <i>Monarda punctata</i>	Horsemint
52. <i>Monotropa uniflora</i>	Indian pipe
53. <i>Myrica asplenifolia</i>	Sweet Fern
54. <i>Myrica</i> (Sp.?)	Bayberry
55. <i>Nepeta cataria</i>	Catnip
56. <i>Oxycoccus microcarpus</i>	Cranberry
57. <i>Panax quinquefolius</i>	Ginseng
58. <i>Pedicularis canadensis</i>	Wood Betony
59. <i>Phytolacca americana</i>	Poke
60. <i>Picea Abies</i>	Norway spruce
61. <i>Pinus Strobus</i>	White pine
62. <i>Plantago major</i>	Plantain
63. <i>Prunella vulgaris</i>	Heal all
64. <i>Prunus americana</i>	Wild plum
65. <i>Prunus serotina</i>	Wild cherry
66. <i>Pyrola elliptica</i>	Canker lettuce, Shin leaf

THE MOHEGAN OF CONNECTICUT—*Continued*

NATIVE USE	PART OF PLANT USES	TYPE OF MEDICINE
Medicine (diabetes)	Blossoms	Simple
Medicine (kidney)	Leaves	Simple
Medicine (infant's sore mouth)	Leaves	Simple
Medicine (colds; stomach)	Leaves	Simple
Medicine (laxative)	Leaves	Simple
Food	Berries	
Medicine (kidney)	Leaves	Simple
Food	Berries	
Medicine	Twigs, leaves	Simple
Utility	Wood	
Medicine (stomach)	Leaves	Simple
Medicine (nerves, pain)	Blossoms	Simple
Medicine (burns, cuts)	Flower buds	Simple
Medicine (lungs; colic in horses)	Leaves	Simple
Medicine (poultice)	Root	Simple
Medicine (diseases of women)	Leaves	Simple
Medicine (stomach; beverage)	Leaves	Simple
Medicine (vermifuge; beverage)	Leaves	Simple
Medicine (vermifuge; beverage)	Leaves	Simple
Medicine (fever)	Leaves	Simple
Medicine (colds, fever)	Leaves	Simple
Medicine (poison ivy)	Leaves	Simple
Medicine (kidney)	Bark	Simple
Medicine (colic, infants; stomach, adults)	Leaves	Simple
Medicine		Simple
Medicine		
Medicine (abortive)	Leaves	Simple
Medicine (sore breasts)	Berries	
Food	Young shoots	
Dye	Berries	
Medicine (boils, abscesses)	Gum	Simple
Medicine (coughs, colds, boils)	Bark	Simple
	Sap or gum	
Medicine (cuts, swellings)	Leaves	Simple
Food	Leaves	
Medicine (fever)	Leaves	Simple
Medicine (asthma)	Twigs	Simple
Medicine (colds, dysentery)	Leaves, fruit	Simple
Medicine (sore mouth)	Leaves	Simple

PLANT AND PLANT USES OF

BOTANICAL NAME	COMMON NAME
67. <i>Pyrus Malus</i>	Apple
68. <i>Quercus alba</i>	White oak
69. <i>Rhus typhina</i>	Staghorn sumac
70. <i>Rorippa Amoracia</i>	Horseradish
71. <i>Rubus hispidus</i>	Blackberry
72. <i>Rubus nigrobaccus</i>	Blackberry
73. <i>Rumex Acetosella</i>	Sorrel, "Sour weed"
74. <i>Rumex crispus</i>	Curly dock
75. <i>Salvia officinalis</i>	Sage
76. <i>Sambucus canadensis</i>	Elder
77. <i>Sanguinaria canadensis</i>	Bloodroot
78. <i>Sassafras officinale</i>	Sassafras
79. <i>Smilacina racemosa</i>	Spikenard
80. <i>Spathyema foetida</i>	Skunk cabbage
81. <i>Spiraea tomentosa</i>	Hardhack
82. <i>Tanacetum vulgare</i>	Tansy
83. <i>Taraxacum officinale</i>	Dandelion
84. <i>Trifolium repens</i>	White clover
85. <i>Urtica dioica</i>	Nettle
86. <i>Ulmus americana</i>	American Elm
87. <i>Ulmus rubra</i>	Slippery Elm
88. <i>Vaccinium corymbosum</i>	Blueberry (Highbush)
89. <i>Verbascum Thapsus</i>	Great mullein
90. <i>Vitis Labrusca</i>	Wild grape
91. <i>Xanthoxylum americanum</i>	Prickley ash
92. <i>Zea Mays</i> (several species)	Corn

THE MOHEGAN OF CONNECTICUT—*Concluded*

NATIVE USE	PART OF PLANT USES	TYPE OF MEDICINE
Food		
Utility		
Medicine (colds)	Bark	Simple
Utility		
Medicine (sore throat)	Berries	Simple
Medicine (poultice)	Leaves	Simple
Medicine (dysentery)	Berries	Simple
Food	Berries	
Medicine (stomach)	Green leaves	Simple
Medicine	Root	
Food	Plant	
Medicine (tonic, beverage, vermifuge)	Leaves (green or dried)	Simple
Medicine (colic in infants; emetic, laxative)	Blossoms	
Medicine (tonic)	Inner bark	
Dye	Leaves	
Medicine (tonic; eyes)	Root	
	Leaves	Simple
		Compound
Beverage	Root	Simple
Medicine (cough; stomach)	Leaves	Simple
	Root	Compound
Medicine (seizures)	Leaves	Simple
Medicine (dysentery)	Leaves	Simple
Medicine (stomach)	Leaves	Compound
Medicine (tonic)	Plant inc. root	Compound
Food	Plant	Simple
Medicine (colds, coughs)	Leaves	Simple
Food	Plant	
Medicine (cough)	Bark	Simple
Medicine (cough)	Bark	Simple
Food	Berries	
Medicine (asthma, sore throat, cough)	Leaves	Simple
Medicine	Leaves	Simple
Food	Fruit	
Medicine (heart)	Bark	Simple
Medicine (poison ivy)	Cob	Simple
Food		
Utility		

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